Fishing at Grande-Grave in the Early 1900s

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Roch Samson

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Abstract

Throughout the French regime, the Gaspé fishery was characterized by the seasonal migration of fishermen from France. The fishery became increasingly sedentary after 1760, as Jersey interests moved in and imposed their organizational structure on the industry. Cod was the major source of dried fish for foreign markets. Jersey firms set up operations at Grande-Grave in this period, and features typical of the Jersey system were still visible there in the early 1900s. There is evidence that fishermen worked under differing conditions. All the fishing techniques were characteristic of coastal fishing, and the catching and processing methods belong to a tradition that originated with the first Europeans who fished in Gaspé waters. Herring, sand lance and squid were the main bait species; the principal types of gear were the herring net, the sand lance seine, the jigger and the hand line; and the Gaspé boat, a type of sailing barge, was the main fishing vessel. Processing facilities were designed for the production of dried cod and cod liver oil. The processing was done by company establishments and independent fishermen alike at the same time of the year, and traditional methods were used in both cases. The Jersey companies still controlled the cod trade in the early 1900s.

Submitted for publication 1977, by Roch Samson, Parks Canada, Quebec Region, Quebec.

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Preface

Our project follows a number of preliminary studies undertaken since 1971 describing various aspects of the history of the people of Forillon. This monograph, part of a research program on the Grande-Grave area of Forillon National Park, explores the cod fishing industry at Grande-Grave in the early 1900s, emphasizing its technology. Our primary source is information gathered during an ethnographic study carried out in the Forillon region in the summer of 1976. We also conducted bibliographic research to place Grande-Grave in the historical context of the Gaspé fisheries and trace the fishing methods used there in the early 1900s to their origins.

Historical Introduction: Cod Fishing in the Gaspé

Europeans used the vast Northwest Atlantic, especially the Gulf of St. Lawrence, as a source of food long before they settled along the Atlantic coast of North America. The way in which they exploited what until recently was considered an inexhaustible resource contributed directly to the type of settlement pattern that took shape in Atlantic Canada, as well as to the development of the region in the short term - and its underdevelopment in the long term. The perception of the Gulf of St. Lawrence area as a food reserve for Europe was probably also responsible for the delay in settling the Gaspé. The French outfitters had to make a profit from the Gulf fishery, and this conflicted with France's need to populate her empire in order to strengthen it. The probable explanation of France's failure to populate the Atlantic region adequately is that seasonal fishing was encouraged at the expense of the more financially risky sedentary fishery.

Seasonal Fishing

It took over 250 years after the arrival of the first European fishermen and 150 years after the founding of New France to develop a system that could result in permanent settlement of the Gaspé. Before 1760 most of the fishing in New France had been carried on by Frenchmen who came to the Gulf of St. Lawrence for the three-month fishing season in summer. They landed only to dry their cod and erect temporary buildings, which they took down before leaving for Europe at the end of the season (Fig. 1; see Illustration Sources following Endnotes). There had been some attempts to colonize the area in the French regime, of course, and these were encouraged by the policy of granting huge tracts of land (seigneuries) on the condition that the new seigneur embark on a mission of colonization. In the Gaspé, however, all such missions were unsuccessful, because it was difficult, even impossible, to persuade men to stay through the long winter in a place that offered them work for only the three summer months. Nicholas Denys, who had received an enormous seigneury on the Gulf of St. Lawrence in 1633, realized this and in 1672 commented

> pour entreprendre une pesche sédentaire avec des profits considérables, il faut faire habiter le pais; mais aussi pour rendre le pais habité, il faut faire en sorte que la pesche produise un pofit si extraordinaire, que le monde, comme j'ay déjà dit, veule bien y venir avec leurs familles pour habitans, et que les habitans veulent bien s'y faire pescheurs.[1]

Colonization of the Gaspé was difficult for two reasons. The first was physical - there was no access to the fishery in winter. The other was economic - fishing could not be made profitable enough to keep men near the fishing grounds throughout the winter. Ice in the Gulf of St. Lawrence, which was then an exclusively coastal fishery, made the access problem inevitable.

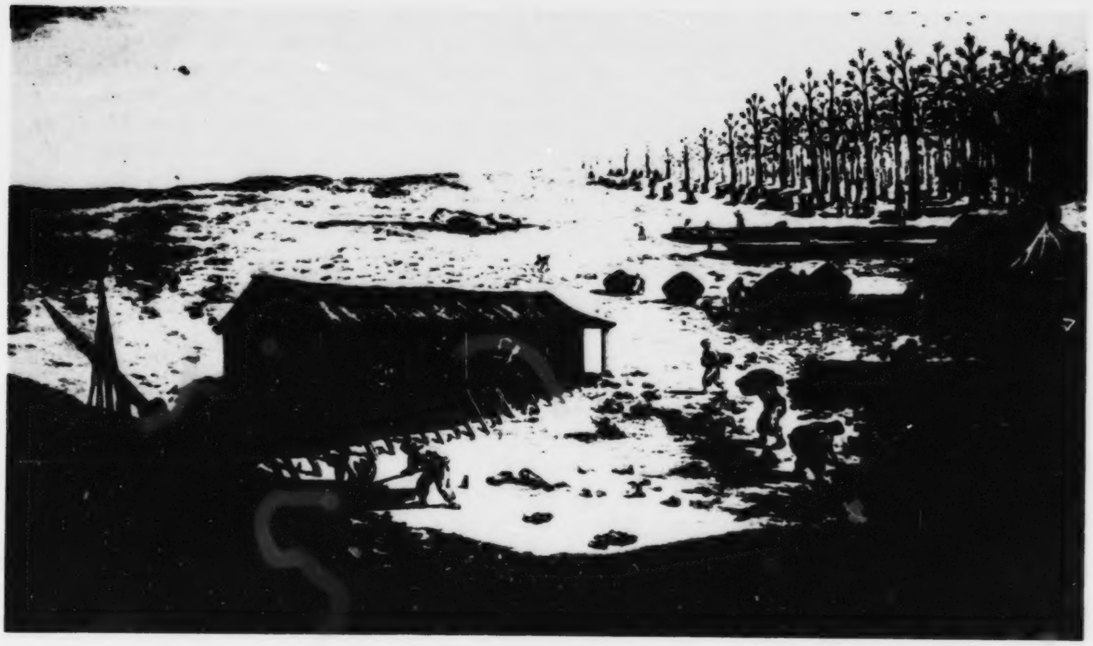


Figure 1. Seasonal French fishing establishment in the 18th century.

As the fishing system used by the French did not bring about permanent settlement of the Gaspé, the success of colonization after 1760 was to depend on whether the British could introduce a fishing system profitable enough to attract year-round residents.

Sedentary Fishing

Permanent settlement of the Gaspé could be achieved only if the fishing industry was organized in such a way that two essential conditions existed, namely the capacity to sustain a population of fishermen year-round, and the possibility of extending the settled area of the coastline by attracting new residents. After the Conquest, merchants from Jersey took over the Gaspé fisheries, reorganizing them in a way that made possible the growth of the first villages in the area. After 1760, as in the French regime, most of the fish from the Gulf was exported. Actually, the local market was never large enough to sustain the industry by itself. In contrast with the French, whose exploitation of the Gaspé fisheries depended mostly on seasonal fishermen from the principal French ports, the British immediately set about establishing more permanent bases for their fishing industry. They tried to bring Gaspé residents into their organization and imported Europeans to teach them fishing and processing methods.[2] However, a stable, durable organizational method was not developed until 20 years after the Conquest.

The beginnings. The first British concerns to be involved in the fishery were Quebec City merchants, who were granted vast concessions of land with the obligation to colonize it, as had been the practice under the French regime. But like their French predecessors, most of the British merchants, many of whom had invested huge fortunes, failed in their attempts.[3] The first Jersey interests in the Gaspé were no more successful. The failures can perhaps be attributed to the overconcentration of capital in one place at a time, which could have been disastrous when the fishing season was poor or productivity was low.[4] In the early years of the English regime, the opening of the Gaspé fisheries to New Englanders and Nova Scotians had soon provoked open rivalry between them and the Quebec merchants. Frequently, fishermen employed by local merchants sold their cargo of fish to foreign schooner captains, while others bartered their catch for liquor, producing a net loss for the local master. There were even reports of thefts of fish that had been left in the care of women and children, by schooners from New England. There were also complaints about the foreign schooners' throwing fish trimmings overboard and preventing the fish from approaching the coast.[5]

The coming of the Jersey merchants. After the first years of uncertainty, the Jersey merchants gradually made their presence felt and made their enterprise profitable in the long run by spreading their investment over several coastal fishing establishments. In this way, they could make up for losses in one district with profits in another, balance losses in one season against gains in other seasons, and compensate for the poor catches of some fishermen by the good returns of others.[6]

But what were these Jerseymen doing in the Gaspé? The *Channel Islands* of Jersey and Guernsey had been under the British Crown for many years, and it would appear that Jersey Islanders had been fishing in North American waters since the 17th century, especially in Newfoundland.[7]

After 1765, the Jerseymen concentrated on the former French possessions of Cape Breton Island, Isle St. John, Labrador and the Gaspé.[8] It was probably easier for them than for Englishmen or New Englanders to become established in these regions because they were bilingual, an advantage in dealing with the Canadians and Acadians, who were, in addition, hostile to New England, mainly because of the deportation of the Acadians, which had occurred but ten years earlier.[9] Some of the Acadians had escaped to the Chaleur Bay area. It was this small population, augmented by Europeans imported every season, that the Robin Company in particular used as the basis for its Chaleur Bay operations.[10] The obvious potential for profit of the Chaleur Bay region was another attraction for the Channel Islanders (who had already become established in Cape Breton). Indeed, the cod came early in the season and the fog was infrequent, so that the cured fish could be dispatched to market "six weeks sooner than in any [other] part of America."[11]

The example of Charles Robin. Charles Robin's interest in Chaleur Bay can be traced to 1766, when he sailed as agent for the

Jersey firm of Robin, Pipon and Company aboard the brig *Sea Flower*. He was also engaged in supplying salt to local traders, in the fur trade on the Restigouche, and in salmon fishing and whale oil production.[12] He gradually extended his activities to Chaleur Bay, establishing his headquarters at Paspébiac, where he trained men he brought over from Jersey, introducing the practice of hiring men to fish.[13] At the outbreak of the American Revolution, about 30

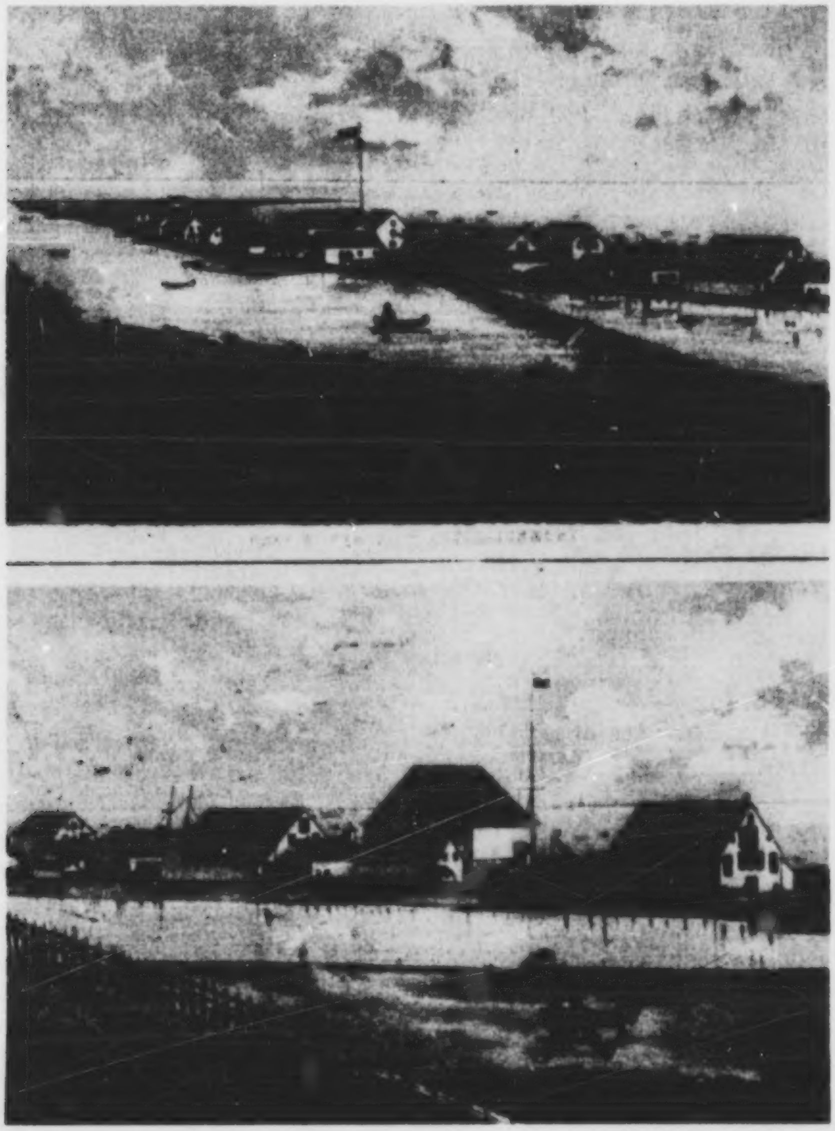


Figure 2. Robin and Le Bouthillier establishments at Paspébiac, 1866.

persons from Jersey and about ten families of Paspébiac caught 12,000 to 14,000 quintals of cod in the single summer of 1777.[14] However, Robin incurred enormous losses when two of his ships were captured by the Americans. In 1778 he returned to Jersey and in 1783 he came back to Paspébiac as the chief partner in Charles Robin and Company.[15]

The Jersey hegemony. In the period following the Treaty of Versailles there was increased activity in the Gaspé fisheries, resulting at first in a series of business failures for many Jersey and Quebec City interests. The Quebec City concerns gradually lost their control over the Gaspé fisheries, which the Jersey companies came to monopolize. In the late 18th century, in fact, the Jersey firms expanded their operations north of Chaleur Bay and Percé to Gaspé Bay. During this period, in 1792, Philip and Francis Janvrin of Guernsey, who were also shareholders in Robin's company at Paspébiac, founded an establishment at Grande-Grave.[16]

The major export markets. At that time, the Mediterranean countries were the major market for the dried codfish exported from the Gaspé by the Jersey firms. The Napoleonic Wars at the beginning of the 19th century gave them the chance to profit from an increase in the price of food and consolidate their position on the Mediterranean market.[17] At the same time, the extension to South America of the colonial trade acts opened the South American market (especially Brazil) to the Channel Island companies.[18]

The Jersey system. This is also the period that provides us with the first descriptions of the internal organization of the Jersey companies and shows us the socio-economic conditions of the fishermen, whose activities were regulated by the truck system.[19] To summarize the system, the fishermen were advanced goods and fishing gear before the season opened and in return they were obliged to repay the company in fish from their catch. Since most of the time the fishermen's annual needs for goods exceeded the commercial value of their catch, especially in a bad season, they were always more or less in debt to the company.

The inability of a fisherman to support himself and his family year round from fishing alone had not been overcome since Nicolas Denys described the problem in the 17th century. But although the problem of making the fishermen self-sufficient had not been solved, a way had been found to keep him near the fishery - by extending him credit. Indebtedness was thus an incentive to the development of the Jersey companies, in whose system the fishermen were encouraged to work at a furious pace. The effectiveness of such a system depended on the monopoly of supply enjoyed by the Jersey companies. Indeed, the fishermen's supplies were controlled through company stores at each major point, giving them very little to choose from, as the companies that ran the stores everywhere in the Gaspé were similar. Later on we will examine in detail how this system was perpetuated at Grande-Grave into the 1900s.

The expansion of the Jersey companies. In the second half of the 19th century, the Jersey companies expanded toward the North Shore.

In fact, the cancellation of the Hudson's Bay Company's territorial privileges over a large portion of the North Shore of the St. Lawrence allowed Jersey concerns to set up establishments in a number of places.[20] To ensure their labour supply, they began by bringing in fishermen from Jersey or Chaleur Bay. The Jerseymen returned home for the winter, and the men from the Chaleur Bay went to Paspébiac, where they received their supplies.[21] Little by little, fishermen from the Gaspé, attracted to the North Shore by the opening of new lands, found themselves drawn into the very system that had driven them from the Gaspé.

Government intervention. Many of the French-Canadian fishermen from such parishes as l'Islet, Montmagny and Cap-Saint-Ignace who swelled the ranks of Gaspé fishermen every summer were diverted to the North Shore at that time. Concurrently, the political authorities became more interested in the Gulf fisheries. In 1852 the Union government created the fisheries protection board, with an inspector's position for the Gulf area. The reports filed by the inspectors (the first of whom was Pierre Fortin, whose term of office was from 1852 to 1867) describe in detail the activities, output and development of all the fishing ports on the North Shore, the Gaspé and the Magdalen Islands. The inspector had two main duties: to protect the Canadian fisheries and, as an officer of the law, to maintain order in the fishing territories. To protect the fisheries, the inspector was required to ensure that the property rights of the fishing establishments were respected, that the species fished were protected, and in particular, that the activities of the many American fishermen working the Gulf were monitored. As an officer of the law, he had to settle any disputes that threatened public order and that often originated in the revolt or desertion of fishermen, whose living conditions were said to resemble slavery. The inspector thus helped maintain the socio-economic status quo as far as the fishermen were concerned, by ensuring legal observance of their contract. At the time, although the fishermen's dependence on the companies was deplored, the effect of government intervention was to consolidate the position of the Jersey companies; indeed there was praise for the extraordinary energy of these firms and their enormous contribution to the development of the Canadian fisheries.

Major changes at the turn of the century. The changes in the fisheries at the end of the 19th century were due not to government intervention but rather to external factors, which altered the rules of the game and in the medium term led to the disappearance of the Jersey companies from the Gaspé. Traditionally, the Gaspé fisheries had been centred on the production of dried salt cod. The Gaspé climate made it possible to produce very dry but lightly salted cod, which won a preferred place on the market. However, the Gaspé fisheries were not alone in producing the light salt cod; Newfoundland and the Maritime provinces did their part too. And, from 1880 on, there was a general decline in the demand for dried salt cod. There are three main reasons for the lowered demand. The first is the increased demand for fresh fish by the American and West Indian markets in particular; second is the coming of the steamboat and railway, which led to the decline of the sailing ships; third is the greater demand for beet sugar instead of cane sugar, which had formerly been stimulated by the dried cod trade with the West Indies.[22]

The stepped-up demand for fresh fish was the result of political developments. The abolition of slavery in the United States and particularly in the Spanish colonies dealt a hard blow to the cod trade, as the slaves used to receive a daily ration of dried cod. In addition, the liberation of such colonies as Puerto Rico and Cuba and the preferential agreements with the United States that followed led to a rise in the customs tariffs against Canadian products.

The advent of the steamboat and railway was a technological change resulting from the modernization of transportation. Increasingly, fish was carried by rail to foreign (i.e. American) ports, where the cargo was loaded onto the big steamers that brought it more quickly to West Indian and overseas markets.[23] The Jersey companies' fleets of sailing ships became obsolete; consequently, the small ports fell into disuse and the firms' commercial infrastructure collapsed.

The growing preference for beet sugar over cane sugar reflected the competitive situation in the sugar trade. The cane sugar trade with the West Indies had long been promoted by the import of fish into these colonies. The trade had led to the construction of large refineries on the Atlantic seaboard, at Halifax in particular.[24] The competition of the beet sugar industry caused the price of sugar to drop 60 to 100 per cent.

The impact of these changes was felt everywhere along the Atlantic coast of Canada, and the dried cod industry, which had fallen to second place behind the fresh fish industry, was to become a regional specialty.

The withdrawal of the Jersey merchants. The high quality (lightly salted) dried cod produced in the Gaspé was probably what enabled this region to stem the tide of change of the late 19th century longer than elsewhere. However, the expansion after 1850 of the Jersey firms to the north side of the Gaspé and to the North Shore of the St. Lawrence brought increased financial risks associated with the extension of the companies' credit. In addition, the growing carelessness in the grading of the cod and the stiff competition the Jersey interests faced on foreign markets resulted in the gradual disappearance or merger of these companies.[25] The history of the Robin Company exemplifies the process by which the companies amalgamated to meet new market conditions. In fact, a series of associations entered into by the Robin company between 1892 and 1912 resulted in a cartel formed to trade in the lightly salted Gaspé cure, the Nova Scotian medium cure and the Lunenburg heavy cure, as well as the Labrador product.[26] However, not all the Jersey companies protected themselves by what has been interpreted as a withdrawal strategy exemplified by the Robin Company.[27] Several firms were obliged to cease operations, including Fruing and Company, which had been operating at Grande-Grave since the mid-19th century.

The example of Grande-Grave. In this monograph, Grande-Grave is studied in the context of the gradual retreat of the Jersey companies. The persistence of the traditional organization of the fishing industry and of the technology in particular, can probably be attributed to the specialization of the region, which is known for the quality of its dried cod. The description of fishing and processing methods by persons who lived at Grande-Grave at the beginning of this century reveals the dependence of the Gaspé industry's organization on 19th-century tradition, in contrast with the Nova Scotia fishery, where modernization had already begun. The survival of the old way of fishing is probably related to the Jersey type of organization, which still appeared to be entrenched in the Gaspé in the early 1900s.

Because the cod is inextricably linked with the history of the Gaspé, it is important to discuss this fish before going into a detailed description of the fishing industry at Grande-Grave.

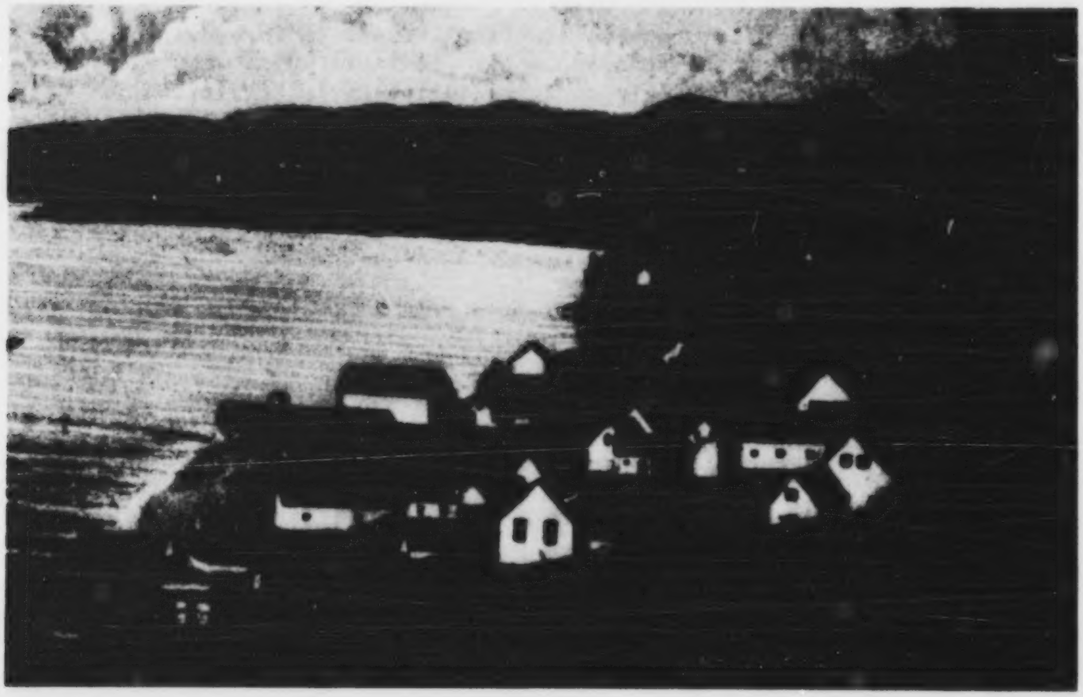


Figure 3. Grande-Grave in 1866.

The Cod

Despite the more than five centuries of intensive fishing, the Atlantic cod (*Gadus morhua* L.), along with the Atlantic herring (*Clupea harengus harengus* L.), has been one of the most important species of fish used for human consumption.[1] In addition to the ease with which it can be caught and its considerable nutritional value, the fact that this cold-water species is abundant on both sides of the North Atlantic is a factor in its commercial importance.

Geographical Distribution

Cod are found in European waters from Ireland in the west and Norway in the north to the Spanish Basque provinces in the south. On the American side, the northern boundary is the Davis Strait, while because of the northern Labrador current, cod are found as far south as Cape Hatteras in North Carolina. This fish lives in regions where the water temperature ranges between 0 and 10° C and the salinity is 34 parts per thousand.

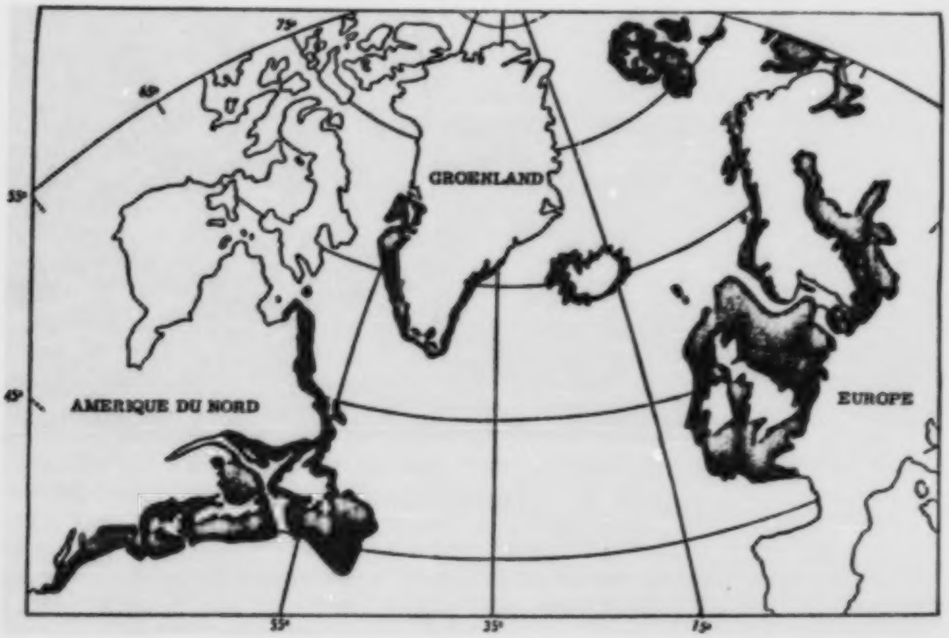


Figure 4. Geographical distribution of cod in the North Atlantic.

Habitat

Cod is a demersal fish but it is often found in the pelagic layer, particularly in spawning season.[3] When the codfish rises from the bottom during the season, Gaspé fishermen say that it is "afloat" and they used to catch it with a short hand line adapted to surface fishing (Fig. 51).[4] It frequents chiefly rocky, pebbly, sandy or gravelly grounds and is usually found near ravines, slopes and ridges. Cod generally prefer depths from 20 to 70 fathoms (one fathom equals 6 ft or 1.83 m, but they have been found at a depth of 250 fathoms.[5] Cod stay nearer the surface in summer than in winter.[6] In summmer they approach the coast to spawn.

Distinguishing Characteristics

Depending on its background, the cod is found in various shades of grey to green or brown to red; this fish can change its colouring to match its surroundings. Another distinguishing mark is found on its spotted sides, where it has a pale lateral line, which probably functions as an ear or radar warning it of danger; its field of vision is probably only a few feet.[7] The cod has a barbel under its lower jaw, and the rays on the two pelvic fins constitute its taste organs; their triangular arrangement helps the cod locate prey on the ocean floor.[8]

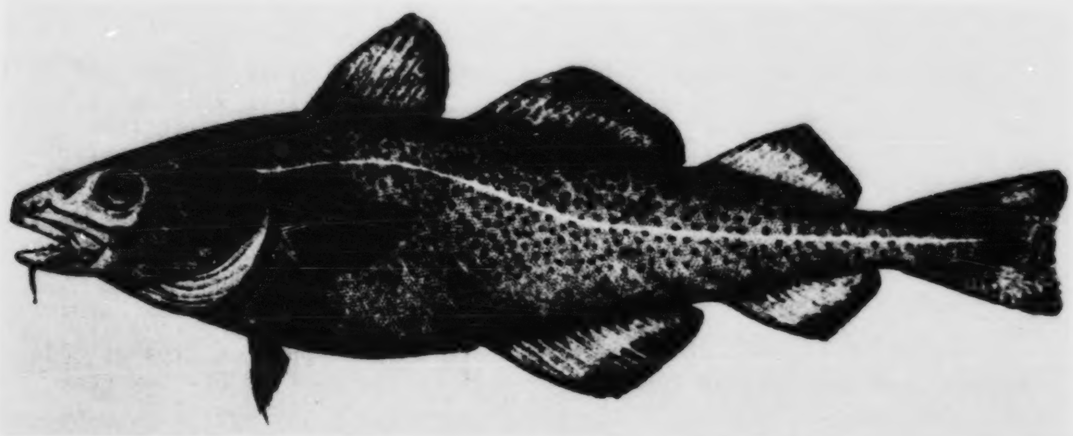


Figure 5. Atlantic cod (*Gadus morhua* L.)

Food

The cod is virtually omnivorous, and there are many tales about its voracious appetite. "On a trouvé dans son estomac des mousses, des coquilles de bivalves vidées de leur légitime occupant et emboîtées les unes dans les autres (afin d'occuper moins de place sans doute!), des ciseaux, des pièces de vêtements, du verre et jusqu'à la tête d'une poupée en caoutchouc."[9] Although the cod is a glutton - and the bigger ones in particular can be cannibals - its diet consists mostly of fishes, crustaceans and mollusks. Fry and young adults under 20 in. long (52 cm) eat mainly crustaceans and larvae of all kinds. After cod reach a length of 20 in., fish (herring in particular) becomes their dominant food.[10] (A Gulf of St. Lawrence codfish of this length would be about six years old and weigh about five pounds.) They search intensively for herring, particularly in the spawning season (from June to September).[11] Other prey are capelin (*Mallotus villosus* Müller) (May and June), American sand lance (*Ammodytes americanus* DeKay) (July and August) and squid (August and September). These are the species that fishermen have always used as bait for cod. Once a codfish has taken the hook it will not fight when the line is being reeled in, which makes it relatively easy to catch.

Spawning

In the Gaspé, the fishing season coincides with the cod's spawning season. Early in spring, the cod migrates north from its southern winter habitat and the first large schools approach the Gaspé coast between mid-May and mid-June. The migrating cod swim against the current, and from deeper to shallower water.[12] They usually spawn in water less than 30 fathoms deep, in fairly restricted areas.[13] During this season, the cod come very near the shore, in pursuit of capelin and herring, which come there to spawn in turn. In the past, Gaspé fishermen found enough cod near the shore at the beginning of the season to get a good catch without having to leave the bay.

The cod reaches maturity between six and nine years of age. It is one of the most prolific of ocean fishes - a 40-in. long (100-cm) female can lay 5,000,000 eggs.[14] The eggs are pelagic, floating with the current. They are at the mercy of the weather and of many predators; consequently only a few eggs of every million produce eventual breeders.[15]

Migration

Migration studies of cod have pinpointed the spawning grounds (summer) and the feeding grounds (winter) of the Gulf of St. Lawrence cod. "On appelle souvent 'migration reproductrice' (*spawning migration*) la migration qui aboutit à l'aire de frai et 'migration trophique' (*feeding migration*) celle qui transporte à l'aire d'alimentation les individus qui ont frayé."[16] Gulf of St. Lawrence cod migrate northwest to spawn in spring and summer and gather in schools, which disperse in the feeding migration of late summer and early autumn.[17] The summer concentration of the species has enabled biologists to identify stocks within the Gulf cod population. Thus the cod found in summer around the Gaspé Peninsula from west of Cape Gaspé to the mouth of Chaleur Bay (Cap-d'Espoir) has been identified as "Gaspé stock."[18] Tagging in various areas of the Atlantic has revealed that most of the cod recaptured in summer in the Gaspé region came from the bank off Sable Island and from Banquereau off Nova Scotia.[19] From this information it can be inferred that the Gaspé cod travels from 200 to 300 miles to reach its spawning ground.

Nutritional Value

Man's appreciation of this widespread, easily caught fish also has much to do with its great nutritional value. Traditional Gaspé dried salt cod is first and foremost a source of protein. Indeed, "la morue séchée, à partir de la morue salée peut comporter de 40 à 42 pour 100 de protéines, avec environ 32 à 38 pour 100 d'humidité."[20] Its flesh is tenderer and easier to digest than meat, but just as nourishing.[21] And cod is an excellent food for the weight-conscious, as its fat content is only 1.6 per cent. Because of its nutritional value and its excellent keeping qualities, this species was a particularly suitable food for European Catholic countries where fasting and abstinence were practised. At the beginning of the 16th century, there were as many as 153 days in a year when abstinence from meat was prescribed.[22] The huge potential market, resulting from the strict observance in that era of the obligation to fast, largely explains why European fishermen were so active after the discovery of the great fisheries of North America. The large number of recipes using cod that have been gathered in these countries shows the importance of this fish as a dietary element. In Spain, it is possible to find 100 such recipes, in France about 50, and in Portugal and Brazil there are over 300 of them.[23] Presumably, the large quantity of Gaspé cod eaten by local fishermen made up to a great extent for the absence of meat from the menu.

The salt used in preparing cod adds such minerals as calcium and magnesium, present in large quantities, to the nutritional value of that fish.[24] The salt content of dried salt cod makes it an excellent food for tropical countries because it helps replace the body salt lost through perspiration. "On sait qu'un litre de sueur élimine près de trois grammes de sel, dans les pays équatoriaux, l'élimination de huit à dix litres de sueur par jour est un fait courant, entraînant donc plus de 20 grammes de chlorure de sodium qu'il s'agit de restituer."[25] In these countries, one hundred grams of dried cod "que les indigènes ne dessalent même pas, assurera la couverture totale des besoins en chlorure de sodium de la journée."[26]

Those hot countries called the West Indies were quickly colonized by Europeans, and the sailors who travelled there had to be able to count on a source of protein that would not spoil during the trip. Hence, dried cod was used as a food for seamen during the age of discovery. During that period as well, there was a considerable trade in black slaves, who were given a daily ration of dried cod. Thus, the West Indies, in addition to the Mediterranean countries, were a very important market for this product that could adequately meet the slaves' food needs. Tens of thousands of quintals of dried Gaspé cod were shipped to these countries every year, and the abolition of slavery, followed by changes in the former slaves' diet, were important factors in the decline of the salt cod industry at the end of the 19th century.

The history of cod fishing shows not only the importance of this fish in the diet of western countries, but also its impact on the development of settlement along the Atlantic coast, and on the growth of a village like Grande-Grave.

A Jersey Fishing Establishment: Grande-Grave

Companies at Grande-Grave[1]

Research is presently being conducted to identify the companies and other groups and individuals that set up fishing establishments at Grande-Grave after 1760. Documents already in the possession of Parks Canada give some indications about them.

In 1783 a letter from Robin and Company noted that Guernseymen had opened an establishment at Grande-Grave.[2] The oldest document about Grande-Grave establishments from the English period presently in the possession of Parks Canada is dated 1795. It tells us that Augustin Lehouillier had owned land there for some years and had had "4 grands bâtiments" erected.[3] On the accompanying map, the Lehouillier establishment can be seen in the St. George's Cove area adjacent to Grande-Grave (Fig. 6). The map shows six lots, and six other buildings, three of them in the vicinity of the "grande grave". There is a vacant lot, owned by James Merrett, just southeast of the Lehouillier property.

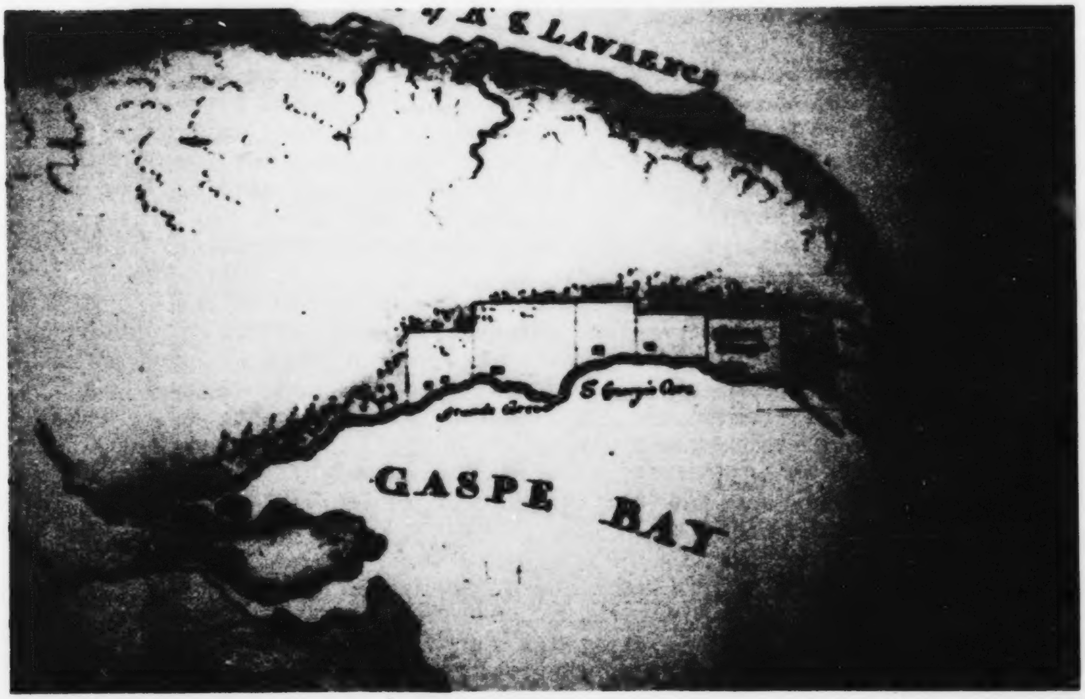


Figure 6. Grande-Grave and surrounding area in 1795.

To the northwest is a lot belonging to Charles Enough with a building on it. Another document, dated 1809, is accompanied by a map (Fig. 7) of the Janvrin establishment, evidence of the Janvrins' presence at Grande-Grave since 1792.[4] The Jerseymen Francis and Philip Janvrin had set up a highly complex operation there. According to certain studies in progress, Janvrin was the biggest name in the Gaspé fisheries at the time.[5] The Janvrin brothers had several establishments in the Gulf of St. Lawrence, and Francis held shares in a number of others, including the very influential Robin and Company of Paspébiac.[6] The Janvrin firm seems to have been the only reasonably big company in Grande-Grave in the first 30 or 40 years of the 19th century. It appears, however, that other establishments, of the Lehouillier type, may have co-existed with the Janvrins'. Indeed, an 1819 map shows three other such establishments, or "fishingrooms," in the vicinity of Grande-Grave (Fig. 8).[7] According to an advertisement in the May 8, 1820 issue of the *Quebec Gazette*, one of these neighbouring fishingrooms was on a smaller scale than Janvrins', employed only six crews or 12 men in all, and included three cabins for these men and a house. The map of Janvrin's fishingrooms reveals a much larger establishment.

To quote Brochet again, "tous les postes des frères Janvrin furent vendus entre 1844 et 1859."[8] This was the period when the Janvrin establishment at Grande-Grave was bought by William Fruing and Company.[9] The owners of the Fruing Company were all at one time or another managers of Robin and Company.[10] Fruing carried on its operations at Grande-Grave until 1918.

Toward the 1840s William Hyman and Sons opened at Grande-Grave, becoming Fruing's major competitor there. Between 1918 and 1925 Hyman bought Fruing out. In his report on merchants in the Gaspé district in 1862, Captain Fortin mentions two names other than Fruing and Hyman: these were Nicolas Dumaresq, at Grande-Grave, and Edward Perry, at St. George's Cove.[11] Their establishments seem to have been smaller than Fruing's or Hyman's, judging by their production, but they seem to have been firmly established and, like Hyman and Sons, each had its own transport schooner.[12] Fruing and Company had four ships. At this point in our research, we cannot provide the dates that these establishments opened and closed.

Around 1916 the Gorton Pew Company opened a branch at St. George's Cove (Fig. 9) and leased a few storehouses from the Fruing establishment, then in decline. Gorton Pew, which produced heavy salt cod, stayed in business only a few years. A merchant named Gaul opened a branch operating from Gorton Pew's old buildings and started up a cod filleting plant at Petit-Gaspé around 1940. This firm closed in the 1950s or 60s. Meanwhile, fishing co-operatives were formed, and Hyman declared bankruptcy and went out of business in 1967.

Nineteenth-Century Fishing Establishment of the Jersey Type

In 1859 Captain Fortin, fisheries inspector for the Gulf of St. Lawrence, provided the following description of the Jersey type of

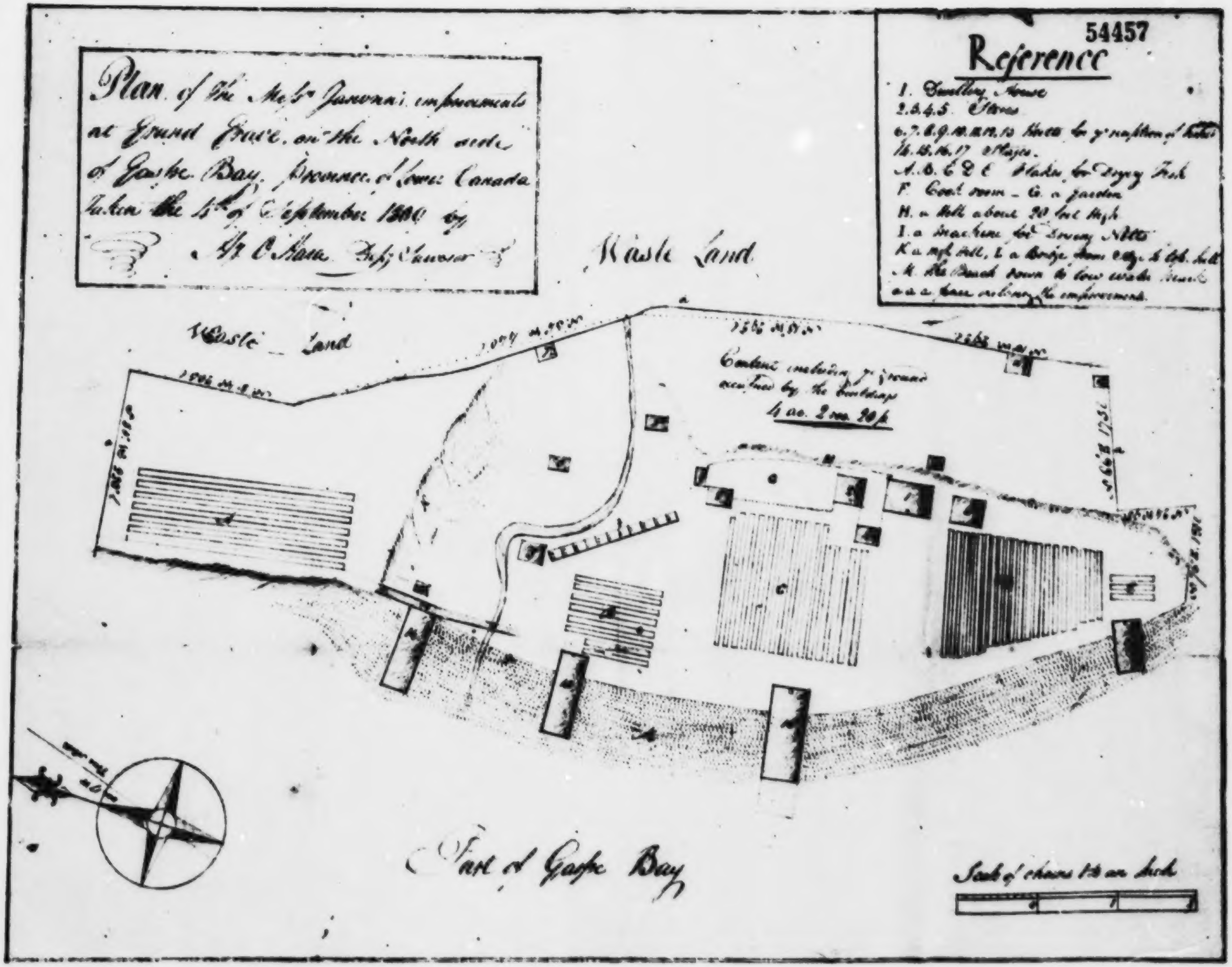

54457
Reference
1. Dwelling House
2.3.4.5. Stores
14.15.16.17 Stages.
A.B.C.D.E Flakes for Drying Fish
F Cook room – G a garden
H a hill about 20 feet high
I a machine for Drying Netts
M the Beach down to low water mark
Plan of the Messrs Janvrin's improvements at Grand Grave on the North side of Gaspe Bay, Province of Lower Canada taken the 5th of September 1809 by
Waste Land
Waste Land
Content including the ground occupied by the buildings 4 ac. 2 ro. 20 p.
Part of Gaspe Bay
Scale of chains

Figure 7. Janvrin establishment in Grande-Grave in 1809.

establishment on the coast of Gaspé or Labrador:

> A fishing establishment on the coast of Gaspé or the coast of Labrador, consists of a collection of large and small wooden buildings, looking from a distance like a village, some of which serve to lodge the fishermen and other employees of the establishment, and others to receive the fish, either in its fresh or salted state and to contain goods, the rigging of fishing vessels and boats, provisions, salt, etc., etc. There is first the house of the chief of the establishment, or the agent in charge, generally placed in the center of the group of buildings, and in an elevated position from which he can see all that goes on in the establishment, and at the same time overlook the boats that are out fishing; then around the stores for foods and for provisions are the sheds in which the fishing tackle is kept, the work shops of the carpenter and sailmaker, the stage, placed as near as possible to the beach, on which are performed the first operations in the process of curing fish. The house of the chief, and those of the employees, as well as the stores and sheds, are very much like buildings of the same kind in our country places. It is not so, however, with the stage, which deserves to be specially described....
>
> The stage is the most important building in a cod-fishing establishment. It is a large wooden building - covered with bark or turk, on the coast of Labrador, and with boards and shingles on the coast of Gaspé - at one end of which is a wharf, called the stagehead extending far enough into sea for boats loaded with fish to come along side of it at low water. The flooring of the wharf, formed of poles of fir, or more frequently still of spruce, is divided into compartments into which fishermen, on their arrival with boat loads of fish, toss them one by one with an implement called a pew.
>
> At the end of the stage nearest to the wharf are the tables on which the cod is dressed. In the middle is a passage, with a level floor of strong planks, on which the shore hands can wheel with ease their barrow loads of salt or fish; and on each side are places for piles of fish, for salt for throughs to work the fish in, etc.[13]

Fortin's detailed account describes the Grande-Grave establishment revealed in iconographic documents from the early 1800s to the early 1900s (Figs. 3, 7 and 11). Some of our informants used to work in this type of establishment at Grande-Grave, and their description - except for local details - corresponds to Fortin's 19th-century report. This type of establishment also resembled the seasonal French operation of the 17th and 18th centuries, except the latter was smaller and more frequently temporary, as most of the buildings were taken down at the end of the season (Fig. 1).

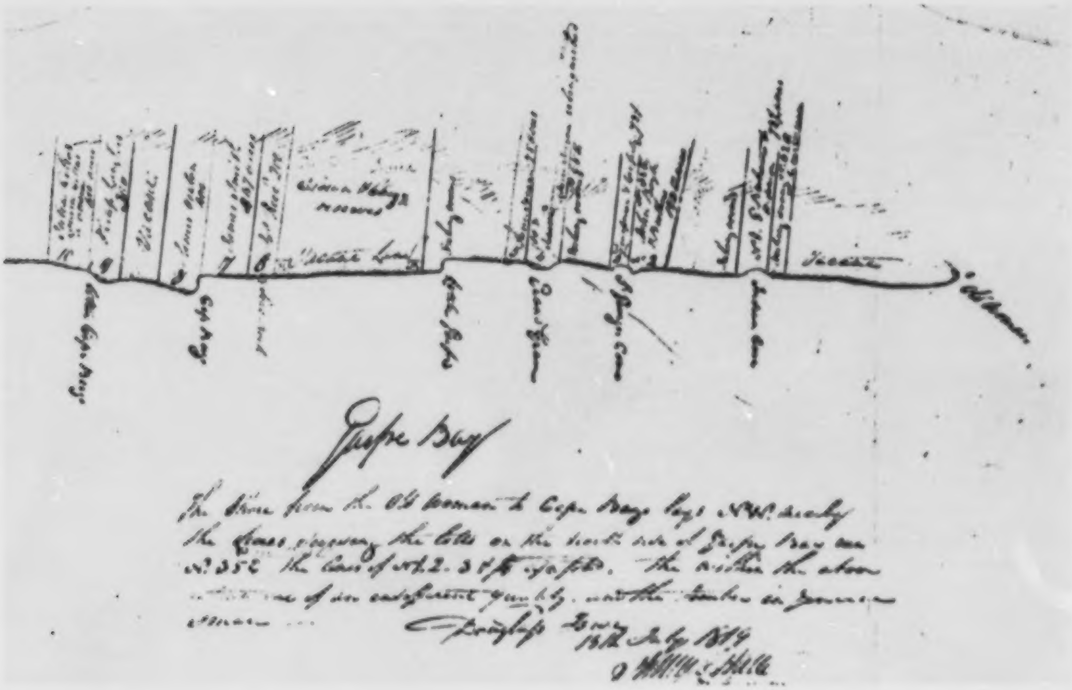


Figure 8. Grande-Grave and surroundings in 1819.

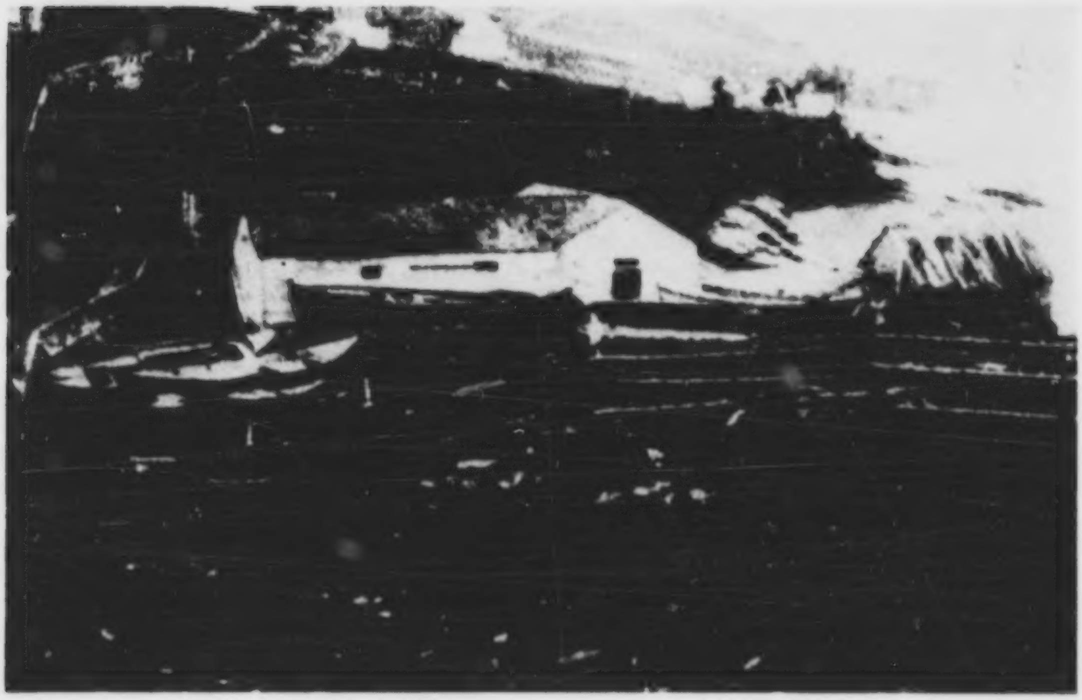


Figure 9. St. George's Cove in 1934.

Development of the Grande-Grave Fishery: The Janvrin, Fruing and Hyman Companies

Location and overview. So far the best picture of a fishing establishment at Grande-Grave is provided by a map of the Janvrin operation, which was taken over by Fruing and Company in about 1850 and finally passed to Hyman and Sons in 1925. Here, I will give only a general physical description of the Fruing establishment and explain some details about the facilities required for processing the cod. The historical reconstruction of the establishment is the subject of a future study.

This establishment took up most of what was called Grande-Grave (literally, big beach). The premises of the Hyman Company, formed in the 1840s, were immediately southeast of Fruing's and included only a small stretch of beach. The two beaches were separated by a cape which projected into Gaspé Bay (Fig. 10). The extension of this cape toward the "chemin du roi" (main highway) formed the boundary between the two properties. Most of the Fruing buildings were on the beach, in contrast to those belonging to the Hyman Company, most of which were built on the cape for lack of adequate room below. The map of the Janvrin establishment in 1809 (Fig. 7) shows a group of buildings inside a fenced area of over four acres. These structures included four stages, eight huts for the fishermen to sleep in, the house of the company agent, four warehouses, a cookroom, a big garden, a ramp from the beach to the high ground to the northwest, a set of drying racks for nets and long rows of flakes. Thomas Pye's 1866 engraving shows, in the background, the equally large structure (less one stage) of the same establishment after the takeover by Fruing (Fig. 3). In the foreground is the Hyman establishment. The 1905 photograph, taken in winter, shows the changes made to Fruing's establishment. There is only one stage (Fig. 11). Somewhat later, the appearance of the establishment was changed yet again, by fire, and by 1925, when it came into the possession of Hyman and Sons, the house of the company agent had been torn down (Fig. 12).

The "grand-maison" and its outbuildings. Rather than the village to which Fortin compared it in the 19th century, the Jersey establishment more closely resembled a plantation or seigneury, in which the hard work of fishermen and shore-workers stood in sharp contrast to the tranquil, gracious life led by the company officers. The village grew up around the fishing establishment. In the middle of the fishing and processing facilities was the "grand-maison" (manor house); the approaches to this building seemed nicely landscaped. Close to the house there was a doll's house for the officers' children, and at the northwest end of the beach, at the foot of the creek flowing down from the cape, there was a duck pond. The "grand-maison" was the residence of the company agent and his family, as well as the store clerks, an accountant, the beach-master and the servants. The Fruing company also owned farmlands and buildings where two farmers and a gardener were employed at the turn of the century. The farmers were residents of Grande-Grave; they were responsible for looking after the animals and the farm buildings in winter when the establishment was deserted by the

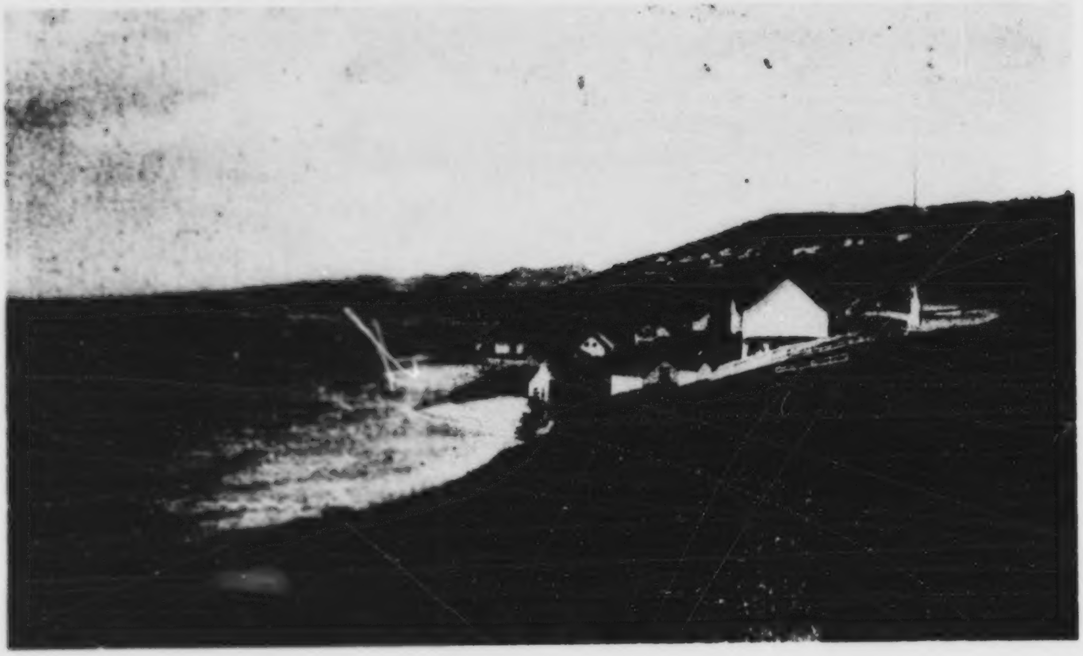


Figure 10. Grande-Grave at the beginning of the 20th century.

Figure 11. The Fruing beach establishment in winter 1905, seen from the bay.

agent who left for Montreal, the clerks who returned to Jersey, and the fishermen and short-workers who returned home in November after the fishing season.

The cookrooms. Beside the "grand-maison" were other dwellings, for the fishermen and shore-workers. These humble structures were

Figure 12. The Fruing agent's house at the turn of the century.

called cookrooms. Usually, there were two crews (four fishermen) to a cookroom. The cookroom might be a building on its own, or there might be several cookrooms to a building. According to our informants' descriptions, the fishermen were housed together in one series of cookrooms, and the shore-workers in another. Most of the cookrooms belonging to the Fruing and the Hyman companies were on either side of the southeastern boundary of the Fruing property. Our informants have told us that the fishermen were put up in one building with seven cookrooms side by side. Along the front of the building was a veranda, where the 28 occupants of the cookrooms could be seen in the evening, rocking and trading stories about their day's fishing.[14] The building or buildings that housed the Fruing shore-workers were built higher on the slope near the "chemin du roi." However, we have no precise information about the way the men were distributed among the cookrooms. Most of the shore-workers also seem to have been accommodated in a single large building, which also included a cookery where meals were prepared and eaten. The Hyman Company employees were likely housed in the same manner, but we have no further details yet.

Every morning at about six, the shore-workers were awakened by a bell - the fishermen had already left for the fishing grounds by then. They could get their drinking water from two places. On the Fruing property it came from the stream that flowed toward the beach on the northwest side, and on the Hyman property there was a well.

Processing facilities: stage, storehouses, drying racks, flakes.
On the lower-lying land of the Fruing establishment, closer to the shore, were the buildings and other structures and facilities in which the cod was processed (Figs. 3, 7, 10 and 11). Fortin mentions the stage as the most important building in the establishment; this was where all the processing operations before drying were centred. At the

beginning of the century at Grande-Grave, the Fruing and Hyman companies had one stage each (Fig. 10). However, Fruing seems to be the only company that also had a stage-head, at the northwest end of the beach. The description of the stage and stage-head matches the one given by Fortin in the 19th century, except that in the Fruing beach establishment splitting operations were located on the stage-head inside a "splittin' cabin," where two splitting boards were set up. Thomas Pye's 1866 engraving shows one of these cabins on each of the three stage-heads then in operation at Grande-Grave, two of which were on the Fruing part of the beach and the other on the Hyman side (Fig. 3). The location of the splitting cabin on the stage-head enabled the splitters to dump the fish heads and entrails out a trap door into the water where they were carried away by the tide.

Upon their return, the fishermen would bring their barge up alongside the stage-head and spill their catch into fish-holds along a lane, from which the porters could load their barrows and take them to the splitting cabins. Once the cod was split, it was taken inside the stage for salting and washing (see the chapter on cod processing). The part of the stage-head that projected into the bay was set on piles and on the floor there were big rocks for anchorage. In autumn, when the season was over, the stage-head and the splitting cabin were taken down for the winter. Around 1905, likely following changes in the way the work was organized and jobs were distributed, the stage-head system disappeared from Grande-Grave.

Figure 13. Grande-Grave in 1969.

The 1905 photograph of the Fruing beach establishment shows the other buildings needed for storing cod that was in the process of being dried, or that had already been dried (Fig. 11). On the 1866 engraving (Fig. 3) and on other iconographic documents dating from the beginning of the 20th century, we can see drying racks for seines and nets that look like scaffolding set parallel to the shore (Figs. 10 and 11). The Fruing flakes were, at the beginning of the 20th century, located approximately in the same part of the beach as those identified at points A and B in the map of the Janvrin establishment a century earlier (Fig. 7). The flakes located at points C, D and E of the same plan seem to have disappeared by the 20th century. The same map shows, at L, a bridge leading from the beach to the flakes, A, passing by the stage, 14. Our respondents have told us that this bridge was still there at the turn of the century. Starting in the early 1900s, the changes that were already taking shape in fishing production, technology and organization began to have a considerable impact on the structure of Grande-Grave. The construction of a harbour in 1951 changed the physical appearance of the beach itself, and by the end of the 1960s only a few buildings from the Jersey era were still standing (Fig. 13).

Fishing at Grande-Grave in the Early 1900s

Coastal Fishing

Background information. Fishing at Grande-Grave, and throughout the Gaspé, was generally confined to about five miles from the shore. Few men from Grande-Grave went to fish as far as the American Bank, 13 miles off the south-southeast tip of the Forillon Peninsula. In spring and fall the fishermen worked in Gaspé Bay, while in summer they fished the banks off Cape Gaspé.

In the early 1900s most of the production of the Gaspé fisheries was due to the efforts of small inshore operators. Coastal fishing was feasible because of a combination of topographical, ecological and technological factors, and it was made profitable for over 150 years by the system, dependent on these factors, that was taking shape by the end of the 18th century.

Let us first consider the nature of these factors and their relationship with the situation at Grande-Grave at the beginning of the 20th century. Two categories of factors are involved: the natural resources of a given environment, and the technology, or material resources, developed by man to influence that environment. These resources were present in the Gaspé, and the system developed by the Jersey companies provided the means of ensuring their use.

Topography. On the south side, the Forillon Peninsula rises sharply from the sea, giving access to good deep-water fishing close by the shore. The spring and fall water temperatures in Gaspé Bay are low enough for cod to come fairly close to shore in pursuit of the capelin and herring that spawn there, the capelin in spring and the herring in spring and fall.[1] By summer the spawning season is over for these species and the water temperature rises, driving the cod to the banks off Cape Gaspé. These banks consist of a row of shoals forming a corridor, which is the undersea arm of the Forillon Peninsula (Fig. 14). In summer, fishermen from Grande-Grave and Gaspé Bay would take their boats to these excellent fishing grounds. The water is about 10 to 30 fathoms deep on these banks, making line fishing easy. Moreover, the rugged terrain gave fishermen precise landmarks for their moorings (Fig. 15).

Ecological advantages: migration of bait species. The Gaspé region is favoured by seasonal migrations of bait fish that attract cod near the shore. The Atlantic herring (*C. harengus harengus*) opens the fishing season in May when it swims deep into Gaspé Bay laying its eggs close to shore and one to three fathoms down. During the herring's spawning season, large white stains - milt and roe - could be seen floating in the bay. At this time, fishermen would set their gillnets close to shore to harvest the precious bait in large quantities. After the spawning season, the herring would swim farther out into the bay, and then the fishermen used driftnets (Fig. 34).

Shortly thereafter, in early June, millions of capelin (*M. villosus*) swarm in. This fish, although also an excellent species for cod bait, was less frequently used as such by Gaspé fishermen, particularly around Grande-Grave. The herring was preferred, as it seemed particularly abundant in Gaspé Bay. Even in recent years, trawlers belonging to a large firm have been seen dragging systematically for herring until the bay bed was just about fished out. Although the capelin was not often used as bait, it was used as fertilizer and for human consumption, either pickle-salted or sun-dried.

Later, in July, the American sand lance (*A. americanus*) appears. In the period under study, crews of seiners were formed by the local company and some independent fishermen to harvest this excellent fish. Sand lance are good bait for Altantic mackerel (*Scomber scombrus* L.) and for cod. Fishermen would take them in driftnets, in the same way they took herring after the spawning season.

In the hot days of August, bait became scarce, so the fishermen went digging for long-neck clams (*Mya arenaria*) at low tide near Douglastown and Sandy Beach. Clams are a hardy species that take the hook well and that cod favour. During the "fag out" - a period that is particularly poor for fishing because it is hot and bait is scarce - fishermen from Anse-au-Griffon and even Rivière-au-Renard have been seen crossing the Forillon Peninsula to dig for clams in the bay, especially near St. Majorique.

Later in August and in early autumn, in the fall fishing season, migrating squid provide another excellent bait for cod. In the evenings, this mollusk approaches the shore to spawn. Fishermen would take it with lures called jiggers (Fig. 39). Squid were abundant around Cape Gaspé.

Later in autumn, the herring returned to the bay, along with another baitfish, the rainbow smelt (*Osmerus mordax* Mitchill). Some fishermen kept fishing for cod until the ice formed, and at times a few have been seen working in the bay until Christmas.

Technology. Fishing techniques had not evolved much by the early 1900s, at least not in the Gaspé, where cod were still caught one by one (or two by two) on a hand line. This inexpensive gear was easy to use and therefore accessible to all. The boats did not require a large investment either. Fishermen could build their own barge using local materials, and the rigging was not costly.

Because of the proximity of the fishing grounds and the limitations of their boats, Gaspé fishermen preferred short day excursions. They could thus bring back fresh-caught cod every day. No doubt the freshness of the fish as well as the light salting used and the rapid drying permitted by the weather were extremely important in the production of the high-quality dried salt cod known on the market as Gaspé cure.

It was these ecological and technological factors that allowed the Jersey companies to set up operations in the Gaspé at the end of the 18th century. And it was the socio-economic conditions that resulted from the Jersey companies' system that made it possible for these interests to maintain their presence in the region. In the introduction, we saw how the fishermen's constant indebtedness had tied them to the region; the perpetuation of this situation, along with the natural population increase, resulted in the Gaspé being settled permanently. Coastal fishing had become an integral part of the status quo, in that it was the technological parallel of the socio-economic conditions in which the Gaspé fishermen lived.

Fishing Grounds

In 1851 Captain Bayfield made the following observations in his work on the oceanography of the Gulf of St. Lawrence:

> Off Cape Gaspé there are several rocky patches, frequented by the fishermen. They all lie in the same direction from Flower-pot Rock, S.E.E.E. The first is a small patch with 8 fathoms least water, the second has 16 fathoms and the third 10 fathoms. Their distance from the rock are seven-eights, 1 1/2 and 13 miles respectively. There is deep water and irregular soundings lying off the coast.[2]

The fishermen to whom Bayfield was alluding were from the Gaspé Bay area, especially the south shore of the Forillon Peninsula. The local names of the fishing banks identified by Bayfield are as follows: Little Bank (7/8 of a mile off Cape Gaspé), Big Bank (1 1/2 miles) and American Bank (13 miles).

The banks are the shoals making up the undersea arm of the Forillon Peninsula. They consist largely of rocks, the habitat for a type of plant life that attracts the schools of fish on which the cod feed. The area from Cape Gaspé to the American Bank forms a corridor no more than two miles wide at most. It has always been an excellent fishing ground. Naturally, fishermen from Grande-Grave, the villages around it and the opposite shore used to go there in summer. The necessity of crossing the bay, however, made the trip longer for men from the other side, so many of them would come to Grande-Grave during the fishing season - particularly the men from Douglastown - and live in cookrooms they rented from the companies or independent fishermen, returning to their villages in fall.

Gaspé Bay. Gaspé Bay was the main fishing ground in spring, and also in autumn, when the high sea winds made it impossible to fish on the banks. The low water temperature in the bay attracted the last migrating cod, which were generally bigger than the summer cod.[3] The fishermen put their big barges up and took to fishing in their flats, near the shore. Men from Indian Cove and the Shiphead in particular could go only a few miles from the shore and cast their lines in 30 or 40 fathoms. The mouth of the bay was also a good fall fishing ground. The area between Grande-Grave and Petit-Gaspé offered good fishing, and the local fishermen called it "port-à-vaches" because of the big cod caught there.

The Grande-Grave fishermen also used the Douglastown Bank, which ranges from 10 to 20 fathoms deep. This bank narrows to a long spit that runs south from Ile Plate to the peak of Pointe St-Pierre (Fig. 14).

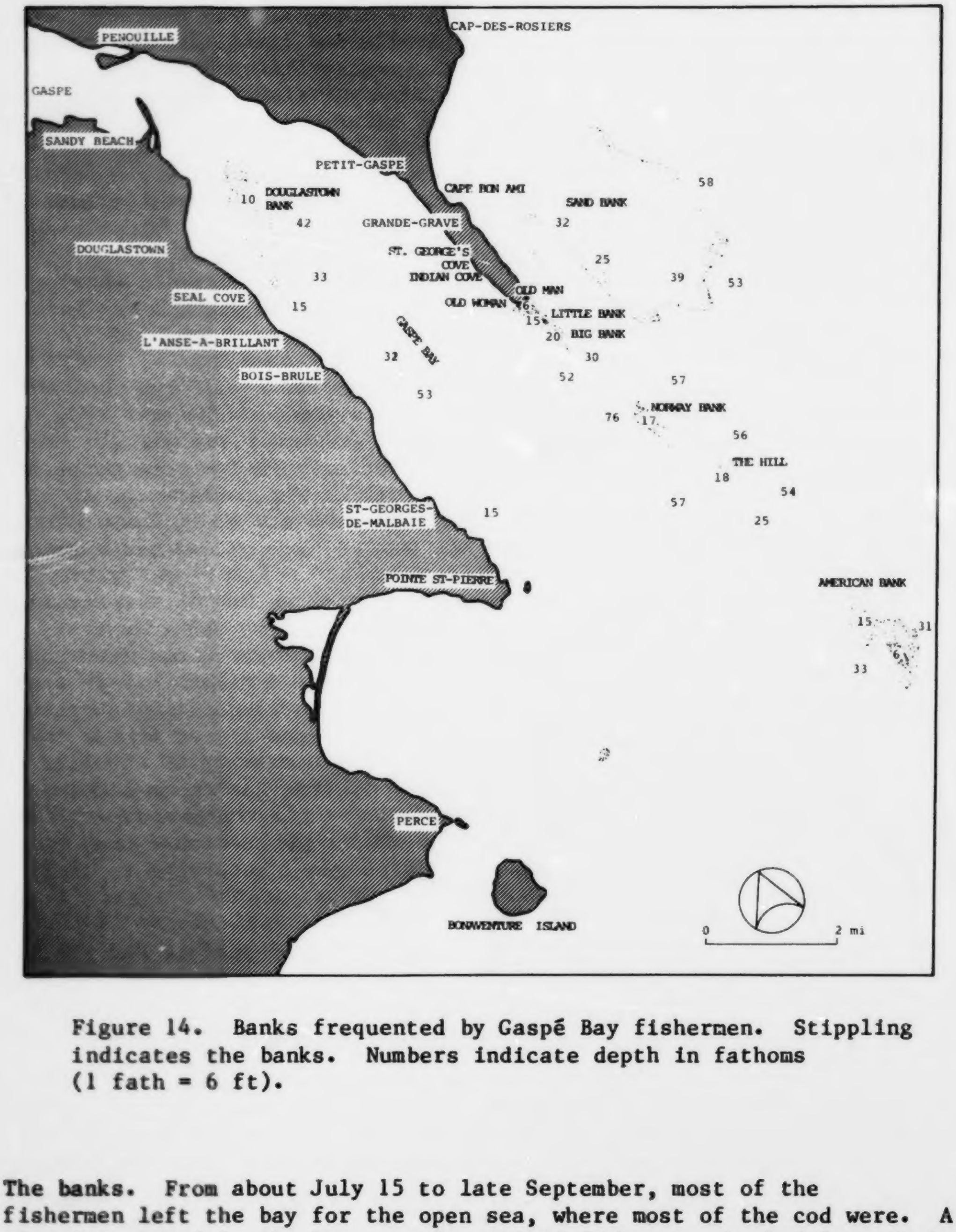


Figure 14. Banks frequented by Gaspé Bay fishermen. Stippling indicates the banks. Numbers indicate depth in fathoms (1 fath = 6 ft).

The banks. From about July 15 to late September, most of the fishermen left the bay for the open sea, where most of the cod were. A minority stayed in the bay, mostly retired fishermen who had lost their taste for seafaring, or whose sons refused to let them go because of their age. Children and adolescent boys could often be seen fishing with the old men. Those fishermen who could not afford a big seagoing barge or had no interest in going to sea "fished here and there".

The banks south-southeast of Cape Gaspé had long been a favourite fishing ground, and local fishermen invented names for them that are still used. The names of some large banks famous for their size, riches or the origin of the fishermen who used them can still be found on nautical charts. Examples are the Norwich or Norway Bank, the American Bank ("banc des Américains") and the "banc de l'orphelin." The others, smaller or included in larger banks, are known only by local fishermen. Following their directions, we tried to pinpoint them on the chart (Fig. 14). The first bank immediately southwest of Cape Gaspé is called the Little Bank. It is no more than a mile long and only 20 fathoms deep. Immediately southeast of this bank is the Big Bank, also called Shiphead Bank, extending to a point about two and a half miles from Cape Gaspé. The water is from 20 to 40 fathoms deep. At the end of this bank is a crevice 50 fathoms deep. Past this hollow, about four miles from Cape Gaspé, is the bank the Francophones call "banc de Legault" or "banc des Legault" after the Legault family from Bois-Brûlé who used it regularly. In English the bank is known as Norway Bank. It is from 13 to 20 fathoms deep. In the same corridor, a little northeast of Norway Bank and about six and a half miles from Cape Gaspé is the Hill, a small bank 19 or 20 fathoms deep. Local fishermen say that only a few boats could moor there because of its size. It was accessible only in fine weather, because it could be found only by landmarks along the coastline. Between Norway Bank and the American Bank there is a long corridor about seven miles long by one mile wide, where the water is about 25 to 40 fathoms deep. This stretch was called "the Brook."[4] Finally, 13 miles from Cape Gaspé is the American Bank, which ranges from 6 to 20 fathoms deep.

In the period under study few men from Grande-Grave could sail out as far as the American Bank, which marked the southeastern limit of the Gaspé Bay fishery. They did, however, venture out to a different bank, northeast of Cape Gaspé. This was the Sand Bank. The fishermen from Grande-Grave would go to the southern tip of this large bank while the men from Cap-des-Rosiers frequented the northern part. The water at the bank was between 20 and 50 fathoms deep. Despite its name, the Sand Bank is mostly rock, according to the fishermen. A number of fishermen told us that during World War II they saw an entire convoy go down just outside this bank.

Most of the fishermen did not venture beyond Norway Bank. Few of them were familiar with the marks for the Hill and very few indeed went as far as the American Bank. The Little Bank, the Big Bank, the Norway Bank and the Sand Bank were the best known.

From their fishing grounds, the men were always within sight of land. Thus, coastal features could be used as reference points for their moorings.

Marking. The fishermen would locate their moorings on the banks by triangulation. From his barge, the fisherman found his bearings at sea by means of landmarks on either side on the coast (Fig. 15). For instance, a mooring on the Sand Bank was located as follows: on one side the lighthouse at Cap-des-Rosiers was lined up with the village church steeple, and on the other side, the rock called the Old Woman was lined up with a mountain called Little Grange, behind Barrachois. In general, the site of a bank was located by means of "marks" known to all fishermen. However, within the boundaries of a given bank, a fisherman could remember good moorings by means of marks that he alone knew. Usually when the fisherman had made a good catch at a particular place, he would mark his mooring. In this way he could say that he knew of a good mooring at 35 fathoms on the Big Bank or ten fathoms on the Norway Bank. The intersection of the lines joining two sets of landmarks determined the location of a mooring, which was equivalent to the area of the barge itself (Fig. 15). In foggy weather, the fishermen used a compass and counted off the time it took them to reach the mooring.

The marks that the fishermen preferred were salient points along the shorescape: mountains, capes, rocks, lighthouses, churches and houses. In the Grande-Grave area, the main marks used were the

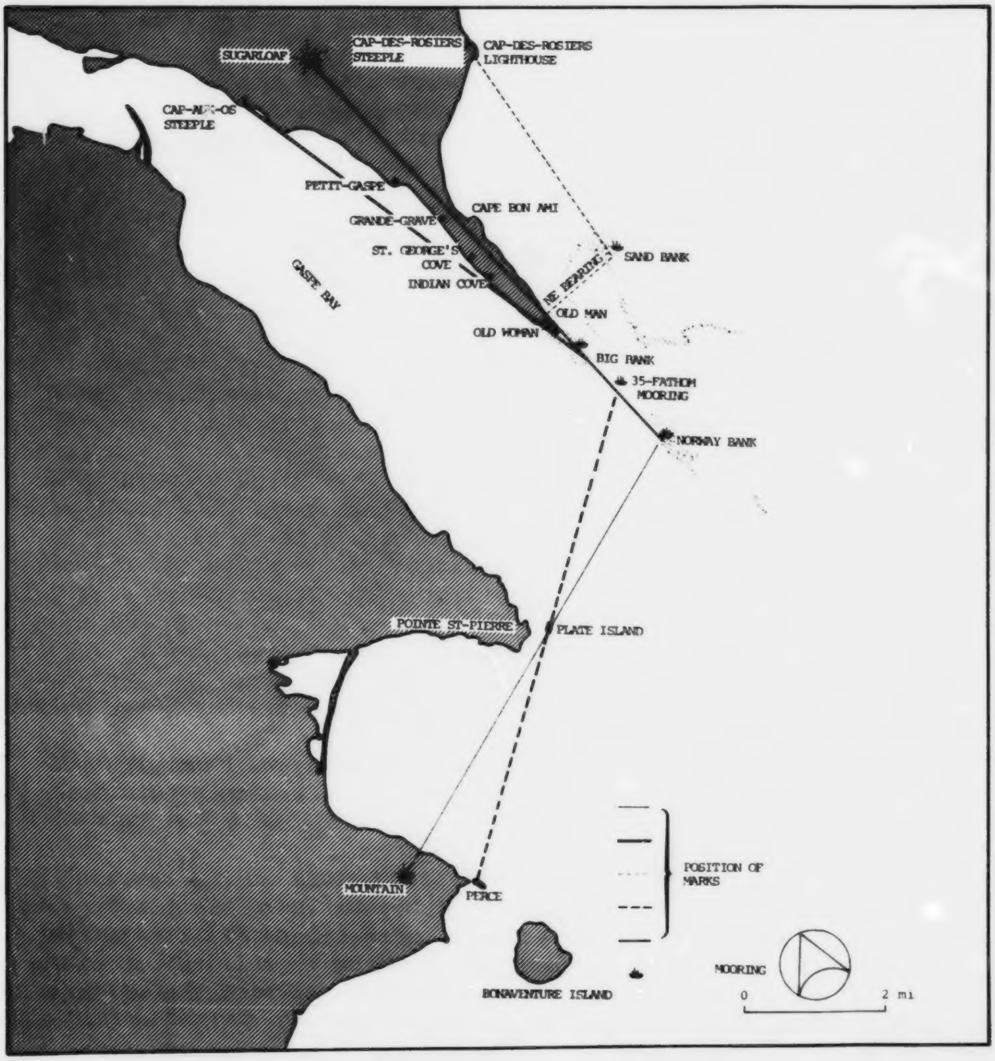


Figure 15. Location of moorings.

lighthouses at Cape Gaspé and at Cap-des-Rosiers, the steeples at Cap-aux-Os and at Cap-des-Rosiers, the highest mountain of Forillon (near the Laurencelle Road), Pointe St-Pierre, the "plaqués" of Cape Bon Ami (that is, black spots in the cape), the rocks known as the Old Woman (or Flower Pot Rock on the chart) and the Old Man, and various mountains.

Most of the fishing banks used by Grande-Grave fishermen were in the south-southeast extension of the Forillon Peninsula. Thus, the men could continue to use one particular mark at least along one shoreline. The mark in question was a mountain in the Forillon area that appears along the south-southeast run of Cape Gaspé. Because of its recurrent use, it was called the bank mark by some anglophone fishermen, while others called it the sugarloaf because of its shape.

The south-southeast run was thus assured by this mark, and the fishermen set out their marks mainly on the southwest side, that is down toward Pointe St-Pierre where marks were easier to see. Some moorings are shown in Figure 15.

Fishing Boats[5]

The Gaspé boat. The type of barge used by Grande-Grave fishermen in the early 1900s was known as the Gaspé boat of the English Shore type (Fig. 16).[6] This name referred to the special type of barge that could be seen in what was called the English Shore region,

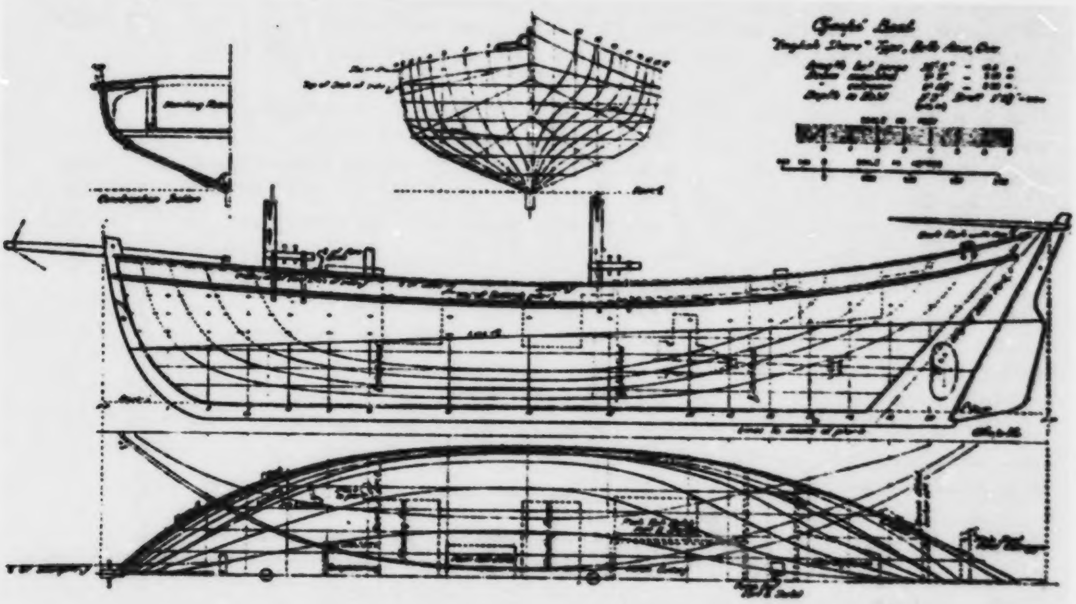


Figure 16. The Gaspé boat.

which was between Gaspé Bay and Chaleur Bay. The Gaspé boat was a small sailing craft that had the reputation of being seaworthy[7] and safe.[8] The prototype for this boat seems to have been the whaling boat, a large longboat used for whaling in the 19th century[9] and by the "long boat des premiers pêcheurs anglais établis sur notre littoral," used "au débarquement à terre des marchandises transportées à bord des grands voiliers."[10] The barge used in Chaleur Bay was of similar appearance, except that the ends were slenderer (total length 32 to 45 ft), and its hollower, wider hull (16 or 17 ft) made it look funnel-shaped.

Characteristics. The Gaspé boat tapered to a point at either end. The stem was rounded and the sternpost was straight (unlike the whaler) to leave room for the rudder, whose blade, in which the tiller was inserted, extended past the sternpost (Fig. 19). The barge was clinker built, the hull was tapered and the rounded sides gave it a good bottom capacity.

The decking of the old fishing barge was not stationary, but moveable. It was made of planks laid widthwise. Because it was not watertight, the fishermen had to bail often, especially in rough seas. The barge had three masts that were also moveable and had only one shroud, for use in strong winds. When they reached the fishing grounds, the men would cast anchor, lower the sails and roll them around the masts, which they also lowered to prevent the boat from pitching too much. The barge had four fore-and-aft sprit sails, called the jib, the mizzen, the mainsail and the driver. When the jib was used, a moveable bowsprit was installed on the stem to anchor the base of the sail (Fig. 20). At that time, masts had neither boom nor spar to extend the sails. Instead, a sprit was used to extend the sail diagonally (Fig. 18).

The big barge and the little barge. Two kinds of barges were used at Grande-Grave: the little ones had an 18 - 20-ft keel, and the big ones had a 22 - 26-ft keel. The average stem-to-stern length was 35 ft. The little barges were used for fishing in the bay and on the Little Bank, while the big ones were used by fishermen who went farther from shore. Their maximum width was 11 ft and their depth 45 in. The big barges could hold 2000 to 3000 lb. of codfish and they drew about three and a half feet. Limestone, which could be found almost anywhere along the coastline at Grande-Grave, was used for ballast. To ballast a 35-ft barge with a 24-ft keel, two flat-loads of rocks were used. The ballast was put in the middle of the barge, on either side of the keel and held in place with wedges of wood under the benches. When the barge was well ballasted, the stem and the sternpost were notched to indicate the waterline.

Construction. Cedar was used for the hull, ribbing and planking. Because there was no cedar at Grande-Grave, it was obtained from Cap-des-Rosiers, Penouille and St. Jean River. The wild cherrywood near Grande-Grave was used for the keel, the stem and the sternpost. Pine and spruce were used for the sheer strake. Young white spruce, which grew behind Grande-Grave and Cap-aux-Os, was used for the masts.

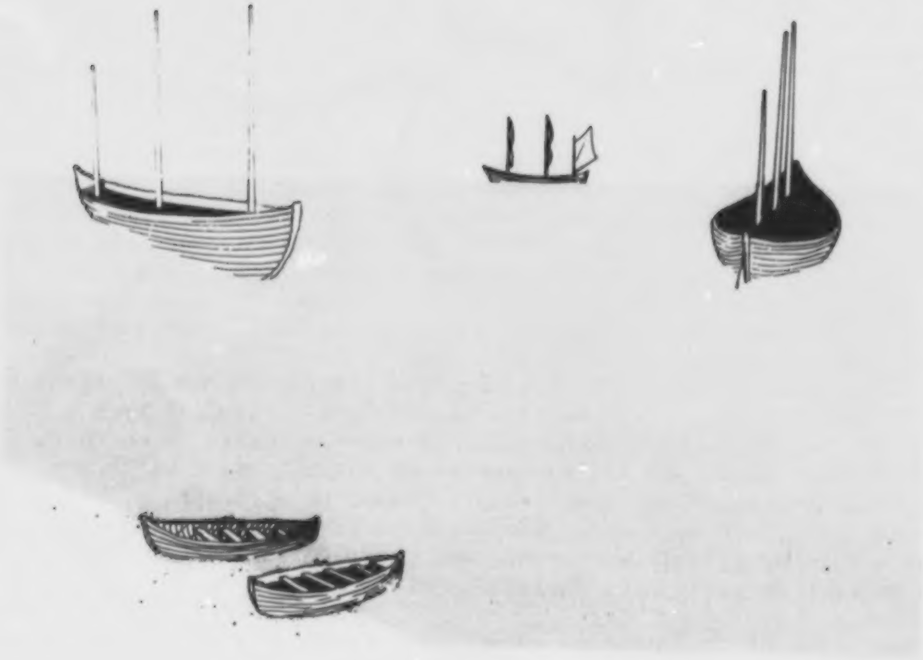
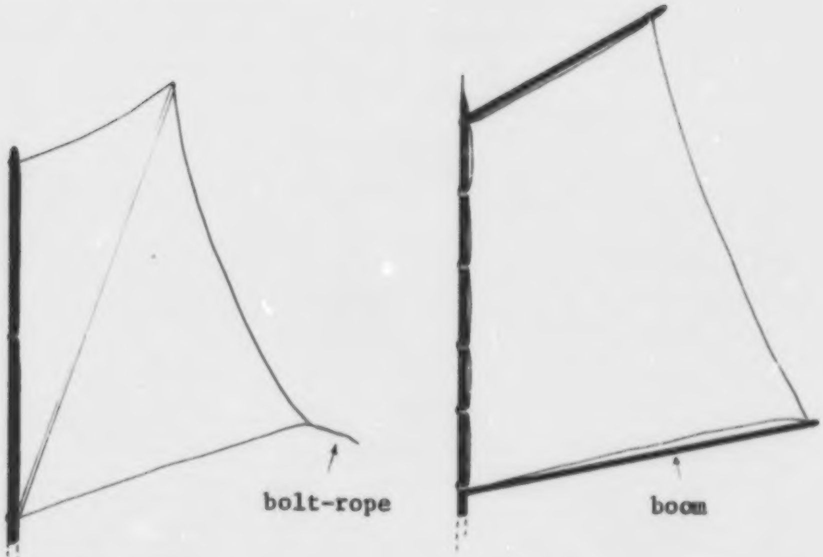


Figure 17. Barges and flats.



sprit sail

gaff sail

Figure 18. Barge sails.

The rudder was made of 1 1/2-in. hardwood. The shape of the barge was determined by moulds used as templates (Fig. 21). Each spring, the hull was coated with pitch which was then heated to make it soak in. This was called "breaming" a barge. Pitch was mopped over the hull, which was then breamed with a piece of burning bark wrapped around a stick. Afterward, the part of the hull below the waterline was painted with copper paint, a fresh coat of which was applied in mid-season. The barges were black except for the sheer strake, which was painted in various colours. All the barges leased by the Fruing Company in the early 1900s had a red sheer strake. Our informants have told us they did not christen their barges. Similarly, there was no annual blessing of the fishing barges at Grande-Grave, which was never made an official parish. At Cap-aux-Os, however, the annual blessing was instituted after the village became a parish.

The barge was made for two men, one sitting in the front and one in the back (the barge-master). In the middle were two or three fish-holds. When the fishermen talked about a "barge" they meant the boat and its crew. On the company beach establishment, when the beach-master handed out sand lance in July, he allocated a ration of it to each crew, not each man. The barge-master sometimes added a third seat amidships for his young son, and many men told us they had learned how to fish by going with their father.

Introduction of the outboard motor. The first outboard motors made their appearance at Grande-Grave during the First World War. One respondent said that in 1913 there were only three barges that had them. They were one- or two-cylinder, four- to six-horsepower motors, and were very noisy. The first ones used were Knox, Imperial (manufactured in Prince Edward Island), Atlantic (manufactured in Lunenburg), Acadia (manufactured in Bridgewater, Nova Scotia), Fairbanks, and Adams. Fruing and Company was the agent for Acadia motors, while Hyman and Sons sold Adams motors. Not all fishermen had a motor for their barge. In 1916, a one-horsepower motor cost $100. Considering that most of the fishermen were in debt to the companies, it is easy to understand why outboard motors were not in general use. The introduction of the motor did not bring about any major changes in the design of the Gaspé boat. Only the sternpost had to be reinforced so that the steering rudder could go through it. The motor was mounted at the back of the boat (Fig. 16). The fishermen kept their sails to have an alternative means of locomotion if the engine failed and to save gasoline when the wind was up.

Accommodation and auxiliaries. At the front of their barge many fishermen set up a cabin called a cuddy, with a stove, utensils, food and two bunk beds. The fishermen did their cooking there, and the bunks were used when they went driftnet fishing (see Fishing Techniques). In fine weather, they would cook on the "cambuse" (rough cookstove) on the deck. The cuddy seems to have been a relatively recent introduction, first appearing in the 1920s. Some of the oldest fishermen alive today remember a time when they would wrap themselves up in a sail to sleep on the deck when they went driftnet fishing. Besides the rigging - sails, ropes, pulleys - the boat contained a good deal of auxiliary fishing

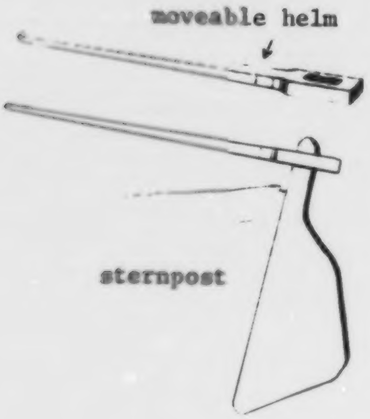


Figure 19. Barge rudder.

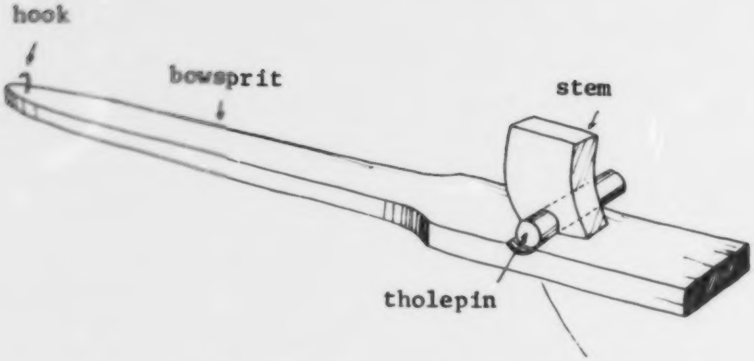


Figure 20. Barge bowsprit.

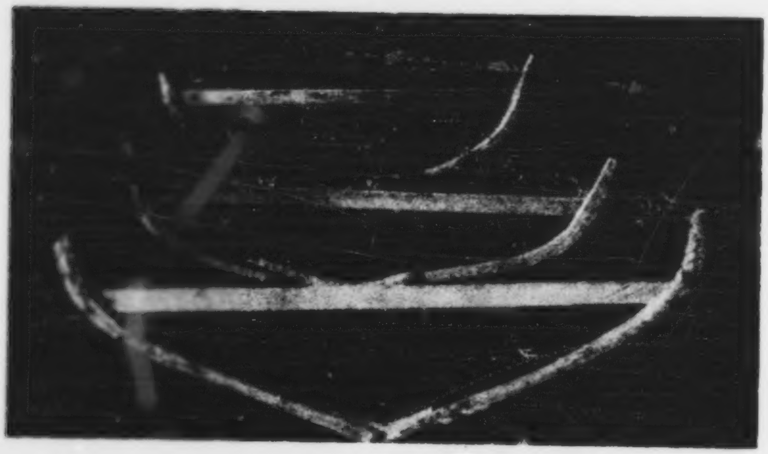


Figure 21. Barge templates.

gear, such as gaffs, grapnels, hawsers, pails, lines, herring nets, knives, mittens, netting needles, oars, bait boxes or baskets and tholepins.

Anchorage. At the beginning of this century throughout the Gaspé, the barges were anchored a few miles from shore, in about eight fathoms of water, as most fishing villages had no harbour. The harbour at Grande-Grave was completed in 1951. Before that time, the fishermen moored their big barge offshore and carried their catch of cod to shore in a little flat (Fig. 17). After a good day's fishing, they could make two or three trips from barge to shore with their fish. The barge was anchored by a securing device called "tangon" (Fig. 22). A large killick was used instead of an anchor, and it was attached to a chain held vertical by a block of wood. A strap, kept afloat by means of buoys, connected the chain to the barge (Fig. 22). The strap ended in a collar hung from the stem and kept in place by means of an iron tholepin. In driftnet fishing, herring nets were connected to the barge in the same way (Fig. 34). At Grande-Grave, in the cove where the company barges were kept, a mooring chain was used to hold them (Fig. 23). The mooring chain was a device similar to the "tangon" except that there was a thick chain, kept on the bottom by heavy anchors, which could be used for anchoring 10 to 12 barges side by side. Securely anchored though they were, the barges could not withstand autumn windstorms. Some fishermen put too much trust in their moorings, and the boat came loose, reaching the shore in terrible condition. But fishermen would not usually take such chances with their barges in bad weather, especially in autumn; rather, they would run for cover in Gaspé harbour when they saw a storm coming. Because of their tapered shape and their ballast, the barges were hard to haul up on shore. The barges used at Cap-des-Rosiers were wider, making them easier to haul up on the beach with a capstan. At any rate, the fishermen had little alternative, as there was no sheltered harbour in the vicinity.

Hauling up. At the end of the fishing season on the banks, in late September, the fishermen would continue going out in little barges or in flats. The big barges were then hauled up on shore. At the Shiphead, in particular, there was no room on the beach so the fishermen from that area and from Indian Cove would take their barges to St. George's Cove, where there was enough room. The fishermen from villages farther northwest would take their barges to Grande-Grave or Petit-Gaspé. The men would form a work party. Several men would haul the barges up either manually or by means of a capstan. First, though, the ballast was removed and a length of cable was attached to the keel to slide the barge up along a ramp made of two long logs placed at right angles to the shore and connected to each other by means of smaller logs.

The old sailing barges were then turned upside down (after the masts had been removed) and put up on blocks so that the ends of the stem and sternpost could not touch ground. In spring, the barges were launched by another work party. In days gone by, toward the end of winter, careful fishermen would cover their barge with branches (twigs)

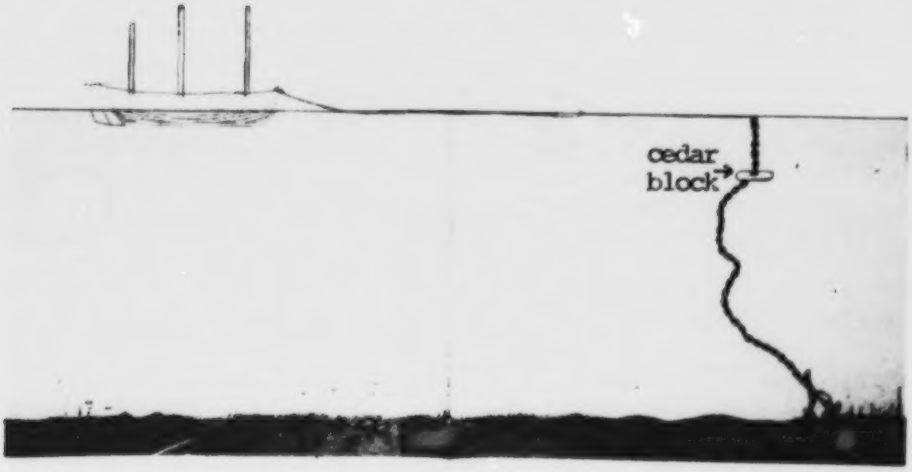


Figure 22. Barge "tangon."

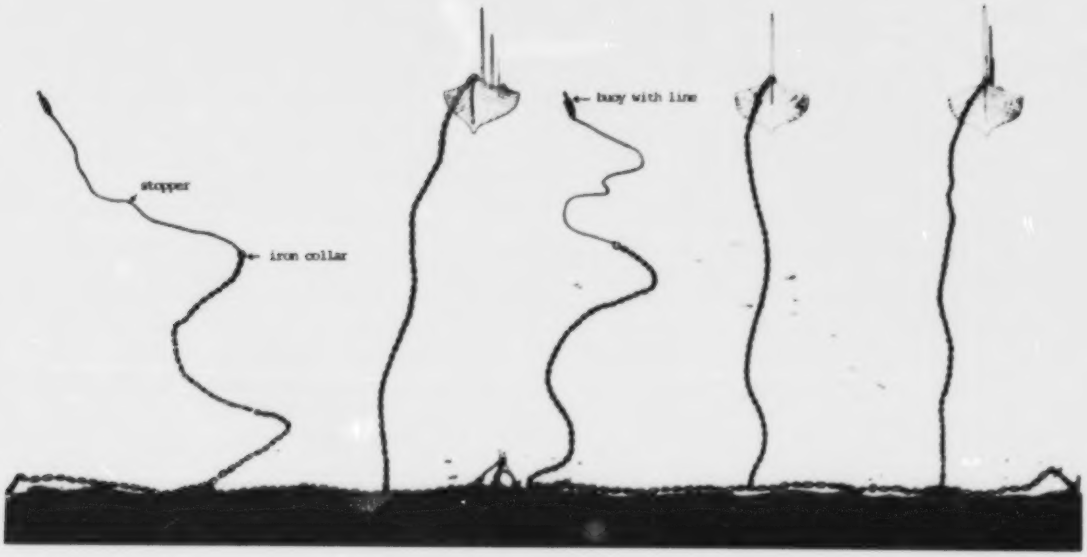


Figure 23. Mooring chain.

of fir which they attached to the keel with a large ribband. This was done to prevent the barge from getting too hot in the warm spring sun; the fishermen hoped to prolong the useful life of their craft in this way.

When the fishing season opened, the men would bream the barges and then launch them at the high tides of late May.

The barge builders. The companies advanced or leased the boats and the rigging needed for the season (June to November) to the men who worked for them, so they employed a carpenter to build and repair their fleets of barges. Each company *also* had a blacksmith who could make the various grapnels and iron fittings necessary for building and repairing the barges and riggings. The firms would give the work of making and repairing sails over the winter to one of the fishermen. Our oldest informant told us that his father had been a "sailmaker" for Fruing at the turn of the century.

Some of the independent fishermen who built their own barges rented boats to the companies and to other fishermen.

Navigation

An accident at Percé, summer 1976. Earlier it was said that the Gaspé boat's shape and construction made it efficient and seaworthy. However, in the mid-19th century Captain Fortin commented on the boldness of Gaspé fishermen, who would sometimes venture miles from shore in their frail little boats. In summer 1976, while we were doing our field research, a dozen tourists, who had carelessly jammed into a flat barely 12 ft long, were drowned near Percé. That day the Gaspé fishermen had not gone out because of the bad weather, and some of them had warned the tourists not to go out into the open sea. When news of the accident and of the fishermen's warning to the tourists broke, the local public interpreted the victims' negligence as a fatal sign, for even today the fishermen's advice must not be ignored, because it was based on more than 300 years of seafaring tradition. Our respondents were keenly interested in the accident and each gave us his or her own version of the tragedy. It was also a chance for them to remember that the number of accidents that had occurred in their own time and in their fathers' day could be counted on the fingers of one hand. The old fishermen made a point of saying that nobody can defy the sea and get away with it, that you must learn to get along with the sea, adapt to her moods. Since the sea is the fishermen's workplace, they are constantly referring to it, and the slightest shift in wind and weather is immediately sensed and interpreted in relation to fishing conditions.

An outing at sea. One day that summer, when we went out with fishermen from Grande-Grave, there were continual radiotelephone conversations with other fishermen about the wind, the current and the swell. The men would ask each other for their interpretations of the nautical conditions and the answers were always based on past experience, related in detail. That day, the men were preparing to raise a third set of nets,[11] when I learned with surprise that we had just changed course and were heading for land. In these last few minutes, more and more messages were exchanged on the radiotelephone. Our captain decided not to raise the other nets because he was afraid that the sea was going to get rough. On the way back (we were ten miles offshore), I could see for myself that the captain had been quite right.

These radiotelephone conversations were the fishermen's way of confirming their own judgment of the situation in order to make a joint decision. The jumble of conversations was like a kind of ritual, aimed at reassuring the men at sea.

The wind. In the early 1900s the use of sails made the fishermen even more dependent on the elements. The fishing season was sometimes delayed for two or three weeks by the weather, especially the wind. The men did not go out in high winds, but went "au dégrat," meaning that they worked in the fields. They also worked processing cod, because high winds speeded the drying. The summer winds in Gaspé Bay were generally favourable. Early in the morning, a northwest land breeze carried the barges to the banks (S-SE) off Cape Gaspé. In the afternoon, the southeast wind helped them get back to the bay. The winds in the Gaspé Bay area were observed in the 19th century by Captain Bayfield.[12] According to his observations, there was a continual south-southeast sea breeze in Gaspé Bay from 9 A.M. to sunset all summer. At night, there was a gentle northwest land breeze in the bay. Off Cape Gaspé, the summer wind was usually from the southwest. But the wind was not always constant. In bad weather, or if the men returned to land later than usual, especially in early autumn, they had a stiff northwest wind to fight (which they called the "vent d'en haut"). If the wind was too high, they had to take shelter in the cove of Cape Gaspé and sometimes stay there all night. If the wind was favourable, they could tack up the bay. A good sailor, holding his barge "en ambition et forcée de voiles," could sail it up Cape Gaspé to Grande-Grave in two tacks. Sometimes, a head wind came up, forcing the fishermen to tack to the banks. On the Sand Bank, northeast of Cape Gaspé, the fishermen could be surprised by a northeast gale that swept them as far as Saint-Georges-de-la-Malbaie on the other side of the bay.

The currents. Bayfield also wrote that a ship driven before a north wind had a hard time entering Gaspé Bay, especially at ebb tide, when the St. Lawrence current reaches the speed of two knots at Cape Gaspé.[13] According to the fishermen, as the river current enters Gaspé Bay, it crosses the outbound current. When the two currents meet, they cancel each other at the Little Bank (Fig. 14). The quiet waters around the Little Bank are usually a safe spot for fishing, and a choice one. However, the fishermen say, the meeting of the currents could have a different effect. Often, the St. Lawrence current could flow through Gaspé Bay to St. George's Cove. At this point, it divided into two branches, one going northwest to Grande-Grave and the other southeast to Indian Cove. The force of the current along the Forillon coast obliged the fishermen to station themselves "a motié baie" when driftnet fishing. The current along the coast drove the barges toward the shore, and the floating nets could be caught on the bottom. In the middle of the bay, however, the barges drifted slowly all night toward the mouth of the bay, and the fishing grounds.

Navigational aids. In the period that interests us here, the compass was not yet part of a fishing barge's standard equipment, and the few in use were dry compasses. Our informants liked to tell us how their fathers used to get their bearings at sea by the swell in foggy weather. According to them, the swell always came from the southeast (Bayfield also noted this). One man told us that one summer he had gone to Anticosti Island with no compass, but with "la houle dans la joue" that is, with the swell on the right side of the barge. Another fisherman, from Cap-des-Rosiers, asserted that at that point, the swell always brought the barge back to land. This can be ascertained by considering the northerly location of Cap-des-Rosiers and the path of the swell (Fig. 14). Finally, the fishermen of old had other tricks of the trade to go by which might make us smile today, but show how ingenious these men were. For example, they could reproduce the principle of the sundial by placing a knife point up between the thumb and the index finger, and thereby find the sun through fog or a snowstorm. They also had a fixed compass, which they held level by floating it in a pail of water, to correct the rolling of the barge in heavy swells.

The fishermen could also go by the lights at Cape Gaspé and Cap-des-Rosiers or the cannon at Cape Gaspé, which was fired every ten minutes in foggy weather. They also had a foghorn with which they could locate other boats. When a barge signalled its position off Cape Gaspé, the man keeping watch would fire the cannon at shorter intervals to guide the lost boat.

Organization of the Fishing Industry

Grande-Grave in the early 1900s was a typical Jersey establishment, in that the local company was the organizational hub of the cod-processing industry. The company supplied the fishermen with their gear and rigging; it acted as agent for the supply of salt (without which no dried cod could be produced), obtaining it in exchange for cod from England or Spain; and it controlled the supply of goods with which the fishermen and processing workers were paid. If the company was the central supply depot, the actual fishing and processing tasks were performed by different work groups or units of production, which we shall call the company beach establishment and the independent fisherman's beach establishment.

The Company Beach Establishment

In the company establishment, which was by far the largest unit of production, there was a clear division of labour between the fishermen and the shore-workers. The latter group included skilled workers, such as splitters and salters, as well as general labourers.[1] There were also craftsmen, such as the blacksmith, the carpenter and the cooper, who provided support services. The blacksmith forged the grapnels and iron fittings the fishermen needed, the carpenter built boats and repaired buildings, and the cooper made the barrels in which the codfish were shipped. The work was supervised by a beach-master, who also controlled the quality of the finished product. The company establishment was constantly busy from morning to evening, with the shore-workers cutting, salting and washing the cod, laying it on flakes or right on the beach to dry, press-piling it and then spreading it out again. All these activities took place on the big shingle beach, where the various buildings and other processing facilities were.

The Independent Fisherman's Beach Establishment

This unit consisted of the head of the family, who was helped by his wife and children, and sometimes by brothers, brothers-in-law, cousins and friends. Only the men actually went out fishing, and the head of the family usually did the splitting and salting. The other jobs - taking the herring out of the nets, drying the nets and throating, heading, laying out and drying the codfish - could be done by any member of the group, including women, children and old people. While the men were out fishing, the women and children, sometimes under the supervision of a retired fisherman, spread the cod out and piled it up to dry. At Grande-Grave, and especially along the Shiphead from

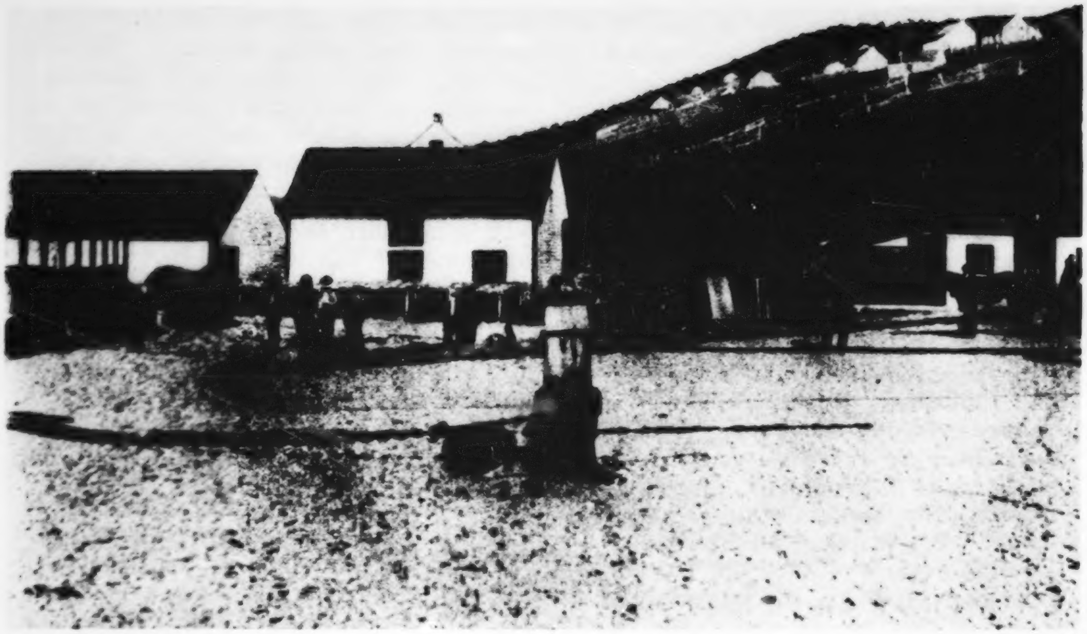


Figure 24. The Fruing beach establishment in the early 1900s.

Figure 25. A family beach establishment at Indian Cove, 1933.

Indian Cove to Cape Gaspé, the strip of beach at the foot of the high cliffs was so narrow that the fishermen had to build their flakes, stages and storage sheds atop the cliffs. Where the beach was spacious enough for the stage, men would split and salt their cod there, and then complete the other processing operations at the top of the cliffs. Because of the rough terrain, the fishermen had to build ramps so they could get up and down the cliffside (Fig. 26). In the steepest places, the men rigged hoists so they could haul the barrows of split cod up to the top (Fig. 27).

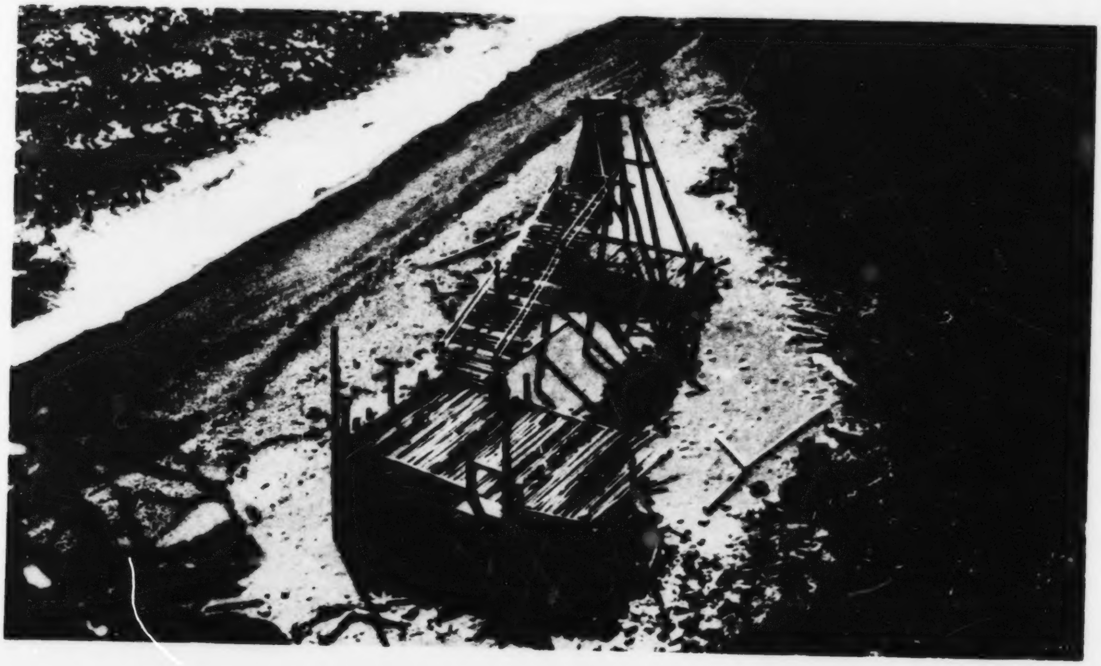


Figure 26. The ruins of a ramp at the Shiphead.

Other groups of fishermen, mostly from Cap-aux-Os or Douglastown, moved to Grande-Grave or a nearby beach for the season to be closer to the fishing grounds or to rent processing facilities from a local fisherman. They were lodged in the cookrooms, often bringing their families with them.

The processing facilities rented by some local fishermen were all that remained of a 19th-century type of organization operating just outside the company beach establishment. They were small family concerns run with the help of seasonal fishermen who were paid according to the halfline system.

The characteristics of these various categories of fishermen will be examined later in this monograph.

Captain Fortin wrote in the mid-19th century that the independent fishermen between Penouille and Cape Gaspé were responsible for half the

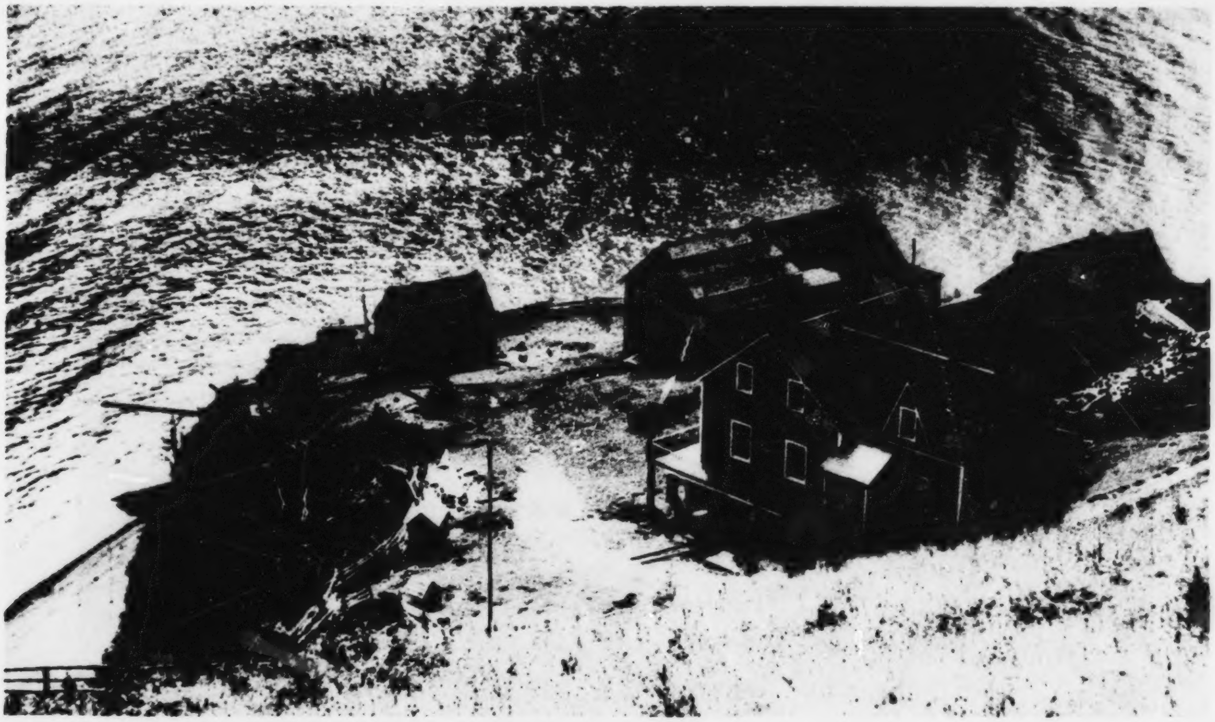


Figure 27. Fishermen's house at the Shiphead in 1948.

companies' total output in quintals of cod:

> Ces trois établissements [Paré ou Perry à l'Anse-Saint-Georges, Hyman et Fruing à Grande-Grave] emploient dans une vingtaine de bateaux de pêche plus de soixante hommes, qui prennent annuellement environ 3,000 quintaux de morue. Ils reçoivent en outre près de 3,000 quintaux de morue sèche des pêcheurs établis sur la côte, depuis la Péninsule jusqu'au cap Gaspé, qui préparent leur poisson eux-mêmes, après avoir reçu le printempts des avances en sel, ustensiles de pêche, provisions, etc., etc.[2]

The fishing and processing equipment used in a coastal fishery geared to the production of dried cod was, theoretically, the same for all. In practice, however, it appears that ready access to this equipment was not universal, and that these tools and facilities were not used in exactly the same way by all. As a result, different status groups developed, with membership determined by whether a man owned his own equipment or had to use someone else's. We shall now examine the characteristics of each category of fishermen.

The Fishermen

Before beginning this chapter, we must state that we do not intend to examine the relationships among individual fishermen or between the fishermen and the companies, which determined the place of every individual or group in the local organization. Our ethnographic material is inadequate for this purpose; therefore, we shall mention facts that can be observed from a first reading of the ethnographic data. Thus, simply identifying different categories of fishermen on the basis of immediately apparent factors can, for now, provide a fairly good indication of the social relationships that existed in the fishing industry.

Differentiating Factors

The immediately apparent factors in question are: residence, ownership of equipment and method of pay. Naturally, they are considered in the context of the specific fishing establishment, at Grande-Grave, and of the type of organization that managed the fishing establishment, the Jersey companies.

Residence. A fisherman's status was determined in part by whether he was a permanent or a seasonal resident of Grande-Grave.

Ownership of equipment. A fisherman's status could also be measured by whether he owned his equipment outright, partly or not at all. The equipment in question was the boat, fishing gear and processing facilities. In Grande-Grave there were some, mostly permanent residents, who owned all their own equipment, some who rented theirs, and some who were hired by the local company, which provided fishermen who had no equipment of their own with the gear and other things they needed. The latter two categories consisted mostly of seasonal fishermen from a nearby village or a different region.

Method of pay. The fishermen could also be distinguished by the way they were paid, and this depended on the state in which they brought their fish to the company - dried cod (the finished product), split salt cod (the semi-finished product) or fresh cod. The product, however, was not the only factor used in determining the method of pay. A company could pay its fishermen in various ways for the same work to stimulate higher productivity. In the 19th century, one company might use two or three methods concurrently. Fishermen paid by the catch could be found working side by side with salaried employees, whose pay varied from individual to individual.[1] Thus, there was not one standard system for paying all the fishermen, but several methods that could be more profitable for some than others, depending on productivity, the seasonal abundance or scarcity of fish, year to year variations in the price of cod, and such other factors as competition between companies. Pay structures could also vary with the type of association between fishermen.[2] While we acknowledge that our current data is too limited to deal fully with the complexities of the pay structure, we can, nevertheless, say that at the beginning of this century at Grande-Grave, most resident fishermen who owned or rented their equipment were paid as piece-workers (the unit being one quintal of dried cod) while their helpers and the company's employees were paid by the share. Payment by the catch (one pound of fresh cod) was probably the general rule for the seasonal fishermen from other villages who brought their fresh cod right to the company. The latter system could also be used to pay residents of Grande-Grave.

Categories of Fishermen

There were thus four kinds of fishermen at Grande-Grave in the early 1900s: the "draft" fisherman (one draft equals 238 lb. of split cod), the independent fisherman, the halflineman and the dealer. The last two categories seemed to be disappearing.

Draft fishermen. These could be permanent or seasonal residents. They might have their own boat and gear, but they had no processing facilities. They were paid by the catch and at that time, this meant by the draft. They brought their fresh fish to the company each day. This was the most common category of fisherman throughout the Gaspé at the end of the 19th century and the beginning of the 20th. Nineteenth-century observers lamented the extent to which these fishermen were indebted to the company, which, through the credit system, kept them in constant debt and ensured a permanent labour supply. In the early 1900s, draft fishermen were recruited from the villages of St-Majorique, Penouille, Cap-aux-Os, Petit-Gaspé, Grande-Grave and Shiphead, none of which had adequate beach area or facilities for processing the cod. Many of these fishermen were French-Canadians from Cap-aux-Os, who were employed by the Fruing and Hyman companies from the beginning of June to the beginning of November. The company provided them with their barge and gear and put them up in the barrack-like cookrooms for $20 a season per barge crew. It will be remembered that in the draft boat the unit of work was not the fisherman but the barge, and the barge always had a two-man crew. Each cookroom held two crews, or four men. The Fruing company in particular used an incentive system according to which the crew that brought in the most drafts in a season was excused from paying rent. The second-best crew paid $10 for the season, and the third-best, $15. All the others paid the full fee. The only restriction on employment seemed to be age. At least one fisherman, the dealer, had to be of age. This was a condition for validating the insurance on the barge.

At the beginning of the century, in the Fruing company, the draft fishermen's only job was to fish for cod. They would leave early in the morning to raise the herrring nets the shore-workers had set the night before, close to the shore. Next the shore-workers would take out the herring and divide the catch among the crews while the fishermen ate breakfast. Then they would row out in a flat to the barges, which were moored to a chain (Fig. 23) in about ten fathoms. When they reached the barges they would leave for the fishing grounds and work until mid-afternoon or even later, depending on how good the fishing was and what the winds were like. Back at Grande-Grave, they tied up their barges to the stage-head (Fig. 3) and unloaded their catch. Finally, they went back to moor their barges to the chains and rowed back in the flats, which they hauled up on the beach.

In midsummer, when herring was scarcer in Gaspé Bay, some fishermen would go driftnet fishing at night and others formed a seine crew to catch sand lance for bait. The fishermen did not process their own catch. When the cod was delivered to the stage-head it was tagged with the fisherman's name, gutted and split. Then it was weighed by the draft, and the fishermen received a receipt for the number of drafts weighed. At the end of the season, the drafts of split cod were converted into quintals of dried cod by a calculation determined by the company. The fishermen were thus paid at the rate for one quintal of dried codfish (or so much a pound of split cod).

For reasons we do not yet know, but which may have to do with the difficulty of recruiting shore-workers, this method of organization underwent major changes in the first years of the 20th century, especially in the Fruing Company. These changes seem to have come about in a short time.[3] Very early in the century, the practice of renting barges and gear by the season for a set price was dropped, obliging fishermen to use their own boats and gear and to set and raise their herring nets. The company provided only the mooring chain used for all the barges. At the same time, the Fruing stage-head was dismantled; the fishermen now had to gut, split and salt their cod themselves, on the beach. They paid $1 for 300 lb. of salt. When the cod was salted (three days in brine) it was taken over by the shore-workers, who washed it and weighed it by the draft. On August 15 when the independent fishermen began coming with their cod, at the end of the summer season, the draft fishermen were shown flakes where they were to dry their own cod, as the shore-workers were too busy to do it for them because they had to receive and ship the cod from the independents.[4]

Seeing these changes, the Gorton Pew company set up a branch at St. George's Cove where it produced heavy cure cod (not sun-dried). The fishermen could then sell their gutted split cod by the pound for cash. Many of them took advantage of this opportunity. They no longer had to stock up on salt and for many of them, it was the first time they had received payment in cash for their fish.

At the time Gorton Pew was setting up business, around 1916, Fruing and Company was in trouble, for reasons that have not yet been made clear. Also, Gorton Pew rented a few cod storehouses from Fruing at Grande-Grave. Shortly afterward, the Fruing operation was purchased by Hyman and Co. Draft fishing continued at the Hyman establishment, but the changes had already begun. The first fishermen's co-operative was set up in 1923 at Cap-des-Rosiers, and another one opened in 1926 at Cap-aux-Os.[5] A little later, a merchant from Cap-aux-Os, Mr. Gaul, took the place of Gorton Pew at St. George's Cove and at Petit-Gaspé. Gaul produced cod fillets; the fishermen sold their round cod to him and were paid in cash every Saturday. There was stiff competition between Gaul and Hyman, who managed to keep a good number of fishermen as his customers and in his debt. Hyman and Company stayed in business until 1967, when it declared bankruptcy. It took many years, competition from new products, and the provision of government assistance for the draft fishermen to escape from their dependence, which was the legacy of the Jersey system.

The independents. The independent fishermen were residents of Grande-Grave or its immediate vicinity, or else they came from a neighbouring village, in which case they lived in cookrooms and rented facilities from residents of Grande-Grave. This category of fishermen owned or leased their processing equipment, furnishing the company with a finished product (dried cod) and being paid by the piece (quintal). They delivered their dried cod when it was ready, or more generally, on or near August 15, the end of the summer season. They differed from the draft fishermen in that they were somewhat self-sufficient. The wealthier ones also had a salmon stand, which was not an insignificant source of additional income. In the Grande-Grave area, most of these fishermen were established at Grande-Grave hill, at St. George's Cove, at Indian Cove or at the Shiphead. Apparently most of them were of Jersey or Guernsey stock and the best-off among them were the descendants of the small producers - the dealers of the 19th century, who had halfline boats. As we saw earlier, at the beginning of the season the company would advance these independents a ration of salt, along with fishing gear and provisions in exchange for their fish. Their indebtedness to the company was lessened if they could earn a sufficient portion of their income from farming, livestock-raising and salmon-fishing. Some of them were independent enough to occasionally sell their cod to a seasonal buyer or a person from a nearby village, from whom they obtained cash to pay back the local company. This was to the great displeasure of the latter, which lost its chance to make a second profit on the goods.[6] We have not yet been able to determine how many independents like these were in the Grande-Grave area. Fortin had said, however, that they produced as much as the company did. Later in the 20th century, the number of independents seemed to increase in comparison to the draft fishermen. As we explained earlier, the company's increasing difficulty in recruiting shore-workers because of competition on the labour market must have favoured the gradual rise in the number of independent fishermen. Government property acquisition policies also seem to have enabled fishermen from Cap-aux-Os and Petit-Gaspé in particular to purchase their own facilities, and to become more self-sufficient by using and selling produce and wood from their farms.

Generally speaking, these fishermen-farmers could live year-round from the fish they caught, the food they harvested and the animals they slaughtered. Few of them had to supplement their income by working in the lumber camps in winter. Many of the draft fishermen, however, did work in the lumber camps, either in the Gaspé or elsewhere. And many of them also worked in the autumn, loading the boats that came to pick up the lumber produced by the sawmills in the region (Sheppard and Morris, Gaspé). Some of the better-off independent fishermen received some education. Certain families were considered almost the social equals of the company's agents and managerial staff. Two of our respondents, of Guernsey descent, completed their seventh grade in a Methodist school in Westmount, Montreal. This was exceptional for the early 1900s, when many Gaspé fishermen could barely sign their names.

Some of the latter group also built barges for themselves and the other fishermen. Those with their own property found all the wood they needed (except cedar) for building a boat on their own woodlots, and some had a workshop with a smithy. Many of our informants who went draft fishing told us that they had had their barge built by certain "gros pêcheurs" from the Grande-Grave area. Some of these fishermen were the descendants of 19th-century navigators who engaged in coastal or transatlantic shipping for the companies.[7] Two sons of these navigators worked until quite recently piloting ships entering Gaspé Bay. Today, many fishermen still work as seamen for big lines in winter.

The halfline fishermen. The men in this category were seasonal residents in the Grande-Grave area. They might own their boats and gear, but they did not have processing equipment. They might work along with an independent fisherman or for a company. In either case, they were paid for their share of the catch, meaning that the crew of the "halfline boat" from which an individual fished received half the value of the catch of cod processed by the independent fisherman or the company. Since each boat had a two-man crew, each man received one-quarter of the value of the catch. Our informants remembered that some men from the Montmagny and L'Islet areas came to Grande-Grave for the fishing season. They seemed to be very productive, according to the local fishermen, who remember having seen splitters employed by the company working late in the evening splitting cod from the halfline men, who always fished a longer day than the others. As it seems unlikely that these fishermen were paid in goods, a more plausible explanation of their high production is that they were paid in cash on the halfline system. This sytem seemed the general rule when a fisherman worked with a dealer.

The dealers. They were similar to the independents, except that they joined up with halfline fishermen for the fishing season. They had additional boats and gear with which they supplied the halfline men. In fact, any independent fisherman might eventually become a dealer, as long as his family was large enough to process an additional quantity of cod, and he owned facilities to accommodate the extra fish. The fisherman-cum-dealer acted as middleman between the small-scale fisherman and the company. In the period under study, their entire output went to the company, which sorted, graded and marketed it. The changes that came about toward the end of the 19th century (the subject of a future monograph) seemed to signal the end of the dealer's usefulness. The dealers' descendants were referred to locally as "gros pêcheurs indépendants." The cookrooms, formerly used to lodge halfline fishermen, were let out to seasonal residents from neighbouring villages.

The Shore-Workers

People employed by the companies to perform various handling and processing tasks were called shore-workers. They might come from outside the region (Montmagny, Cap-Saint-Ignace), from neighbouring villages (from St-Majorique to Petit-Gaspé) or from the village of Grande-Grave. Those who came from outside Grande-Grave, mainly from Cap-aux-Os, lived in the company cookrooms. They were paid a set wage,

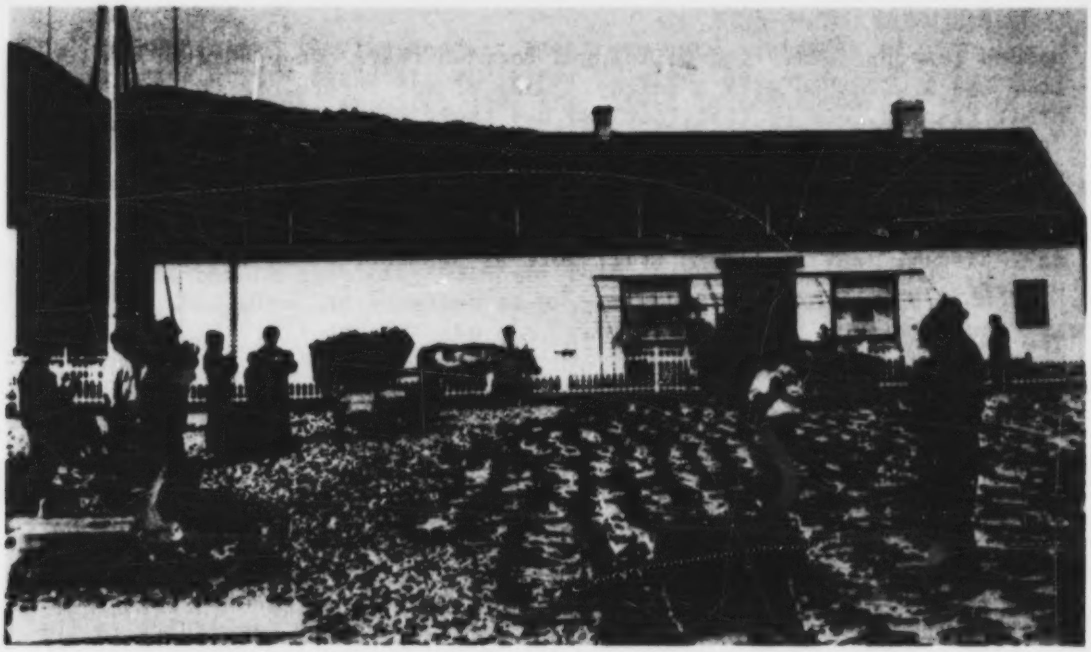


Figure 28. Shore-workers working at the Robin and Company beach establishment at Percé in the early 1900s.

which varied from job to job, with the splitters getting the best rate. At the turn of the century, according to respondents, the average salary was $15 or $16 per month. Every fortnight the shore-workers received the "loan" which was their food supply for two weeks. They got one quart of molasses, one pound of butter, lard, two or three pounds of beans, seven pounds of salt pork, 20 to 25 lb. of coarse biscuits and 14 lb. of flour. The individual took his provisions to the company cook, who prepared the meals in a cookroom. Most of the shore-workers were youths, who worked as splitters, throaters, headers, salters, washers or porters. All these workers except the porters worked in the stage, splitting and salting the fish. The porters carried the cod from the splitting board to the salter, from the salter to the piler and so on, up to the point where the cod was spread on the flakes or the beach. Sometimes, on a windy day, fishermen would also do this work, at the rate of 50¢ a day. Old men, women and children could also be seen doing these jobs from time to time to supplement the father's income. They were employed toward the end of the season, especially when the resident fishermen brought in their catch, which made extra work for the shore-workers. The day labourers were paid with coupons that could be redeemed only at the company store. The shore-workers' day started at 6 A.M. when they were awakened by the company bell. The splitters might have to work late in the evening, after the last fishermen had returned. The company employed a beach-master for the whole season, who would act as foreman and as culler. He was the man responsible for producing good quality cod for the company and judging the quality of the fish brought by independents. The men who performed this duty were chosen for their experience with cod, for their leadership ability, and for their loyalty to the company. They did not necessarily live in Grande-Grave; some of them came from other villages where the company had establishments. The beach-master generally lived in the company agent's house during the fishing season. In the 19th century, the job of beach-master could also be given to captains of company ships, as Pierre Fortin noted: "les maîtres des navires [des compagnies jersiaises] sont en même temps pêcheurs et capitaines au long cours. Pendant l'été, lorsque leurs bâtiments servent à attendre des chargements, ils commandent à terre des escouades d'hommes employés à préparer le poisson."[8]

Fishing Techniques

Traditional Fishing Methods

It is remarkable that despite the availability of high-yield techniques in the period under study and even earlier, the hand line remained the main piece of equipment used in coastal fishing. However, as we have already seen, the traditional methods used in the Gaspé could be compatible with a system that could use low-yield techniques to advantage. It seems more logical that the traditional methods were kept because of this compatibility than because the Gaspé fishermen were too conservative to change their methods. In any case, as we pointed out briefly in the introduction, technological changes never come by themselves; in the case of fishing techniques, a general trend toward change had begun in the fishing industry in the late 19th century. The slow pace of change can therefore be attributed not to the fishermen's inability to innovate but to the incompatibility of the new methods with the Jersey companies' type of organization.

Whereas we live in a world where technical innovation is one of the first steps a company takes to increase productivity, a century ago the Jersey companies could find traditional, labour-intensive methods profitable. This fact points up the remarkable adaptability of the capitalist system to changing times.

For nearly 400 years, fishermen in the Gulf of St. Lawrence caught cod one by one, with a hand line. It is astonishing to note the slow pace of change in the fishing industry, as far as the development of new techniques is concerned. In some areas, such as Grande-Grave, such novelties as the bottom longline seem to have been introduced later than elsewhere. In this connection, fishermen from Grande-Grave often cite Grande-Rivière as a centre of technical innovation in fishing gear and boats. The Hyman Company's continued use of the Jersey system in the 20th century seems to provide a plausible explanation for a number of things.

In this chapter, the fishing techniques and processing methods used at Grande-Grave in the early 1900s will be described. The reader will note that little space is devoted to cod fishing per se. This is due partly to the simplicity of the techniques used and partly to the greater complexity of the methods used to gather the bait needed to catch the cod. The success of a cod fishing expedition depended directly on the amount of bait caught. For this reason, the techniques used and the type of bait taken will be discussed first. We have given accounts of techniques used in the 18th and 19th centuries along with our description of early 20th-century methods, to emphasize the persistence of the traditional ways.

Herring Fishing

The gillnet. In Gaspé Bay, herring was the main bait used for cod (Fig. 29). To catch herring, the fishermen used floating gillnets anchored close by the shore in about nine to ten fathoms. Because herring spawn close to shore, the nets caught the fish in their run. To describe the gear and mooring system, the local fishermen spoke of a herring-net anchorage ("tangon de rets") (Fig. 30). The nets were manufactured elsewhere; the fishermen ordered them in fall and purchased them the next spring from the local store. In 1920 a herring net cost $45.

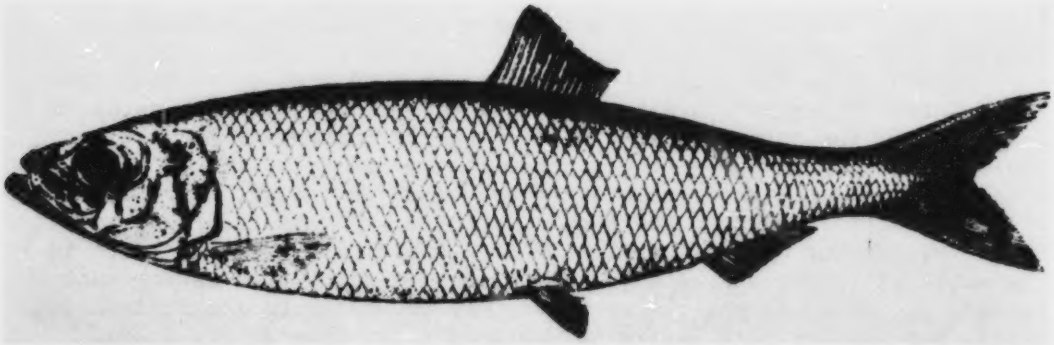


Figure 29. Atlantic herring (*Clupea harengus harengus* L.).

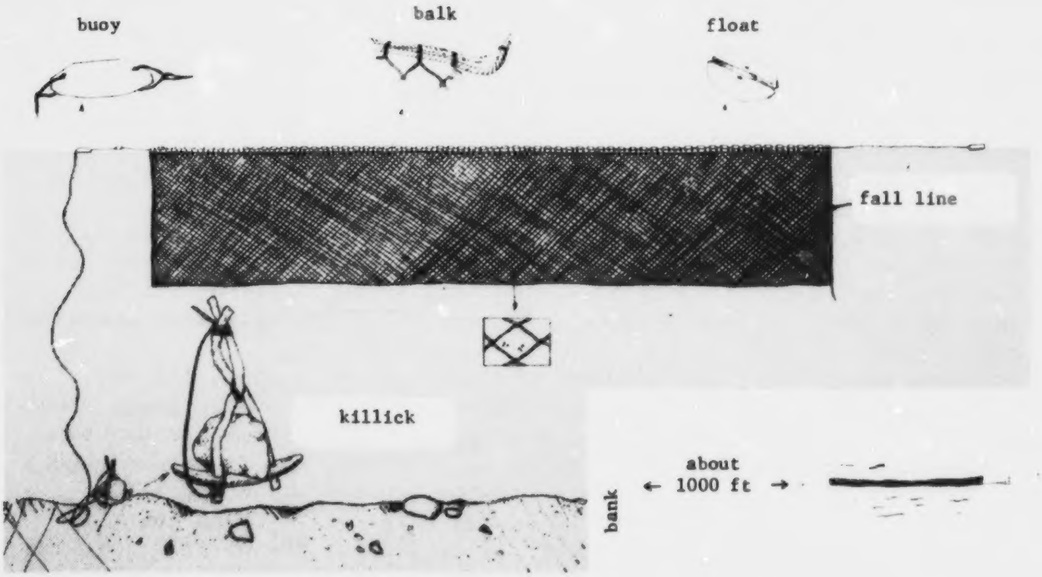


Figure 30. Herring-net anchorage system.

The herring nets were delivered assembled ("montés") but not floated ("flottés"), to use the fishermen's terms. An assembled net is equipped with the balk ("belée") or headline, which has two ropes arranged parallel to each other with their lay in opposite directions; with the regularly spaced short ends ("pentes") joining the webbing to the balk; and with the vertical fall line ("maître brin"), at each end of the net.[1] To "float" a net the fishermen used homemade cedar floats which could be flat, ovoid or round. These were attached to the balk at intervals of one or two feet.[2] The nets were usually 25 to 30 fathoms long, and 5 or 6 fathoms deep. When herring was scarce, the fishermen joined three to five nets end to end with a length of rope which was used to strengthen the headline. The mesh size could range from one and a half inches (used in spring) to two and a half inches (in fall). Nets made in the early 1900s were of twine; cotton was used somewhat later.

Before using the nets, the fishermen treated them by soaking them in tanbark. The bark could be purchased or homemade, and it was mixed with water. The purpose of the process was to waterproof the net and prolong its life by protecting it from the corrosive action of salt water. The treated net became stiff and black in colour, especially when vitriol was added to the soaking solution.[3] This treatment was done every spring before the fishing season and possibly once again in the summer.[4] A net that was well cared for by regular remeshing and tanning and dried properly after every use could theoretically last ten years, but usually nets had to be replaced after five or six years.

The fishing expedition. Herring was caught from late May or early June until mid-July. The beginning of the fishing season coincided with the herring spawning season. At this time, schools of herring were abundant. The white scum on the water formed by the males' milt was a sign that the herring were coming. The females deposited their eggs close to the shore, and at low tide the beaches were covered with them. During the spawning season, herring were so plentiful that they were enmeshed in the net. Later in the year, they were scarcer and could be caught in the net only at daybreak, when the water no longer "fired." They used the expression "l'eau est en feu" to describe the reflections that could be seen in the water at night. The net also produced reflections in the water at night, which the fish could see, so they avoided the nets until sunrise. The nets were therefore put out at nightfall and taken in early in the morning. The fishermen went to their nets early, before daybreak, to keep the cormorants from stealing their catch.

When the fishing was good and the current was strong, the net, which was anchored at only one end, often got caught on the ocean floor and sometimes hooked where it had been set, because the water was so shallow (nine or ten fathoms). To unhook the net, the fishermen used a small grapnel or a device called a "chatte," which was a specially designed grapnel weighing about 10 pounds (Fig. 31).[5] When the net was raised, it was brought to shore for removal of the herring. It was then thrown into a barrow, and usually the fisherman's wife and children would take it up the cape, where it was hung on the drying racks (Fig. 32). Toward noon, the dry nets were taken down so that the wind would not rip them.

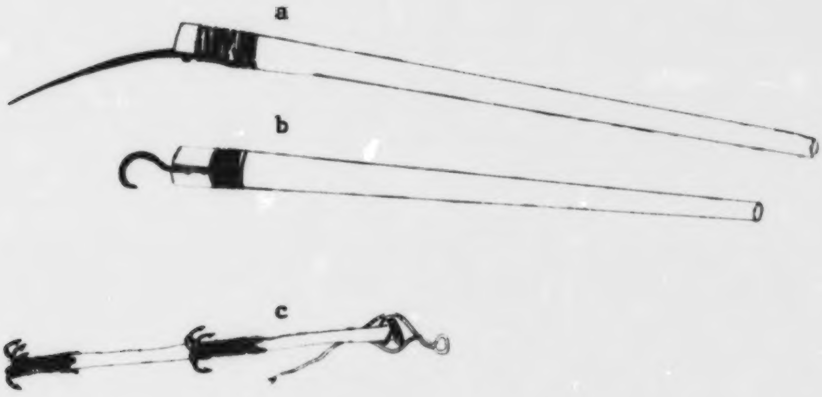


Figure 31. a, "Piquoi"; b, gaff; c, "chatte."

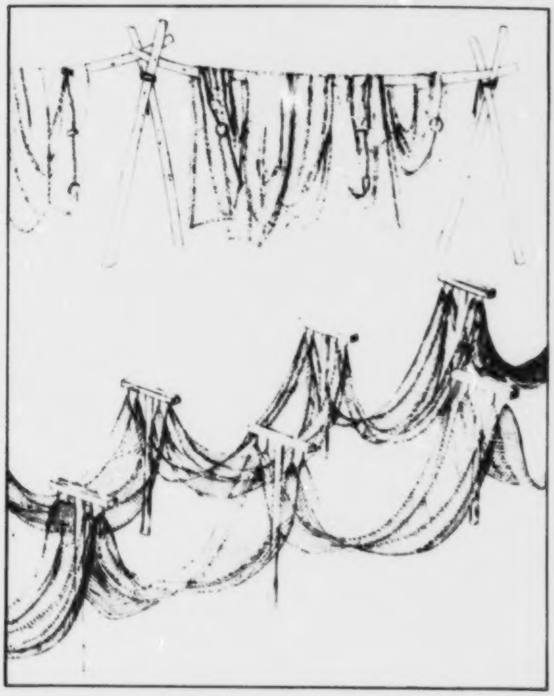


Figure 32. Drying racks.

Our description of herring fishing applies to the independents, who had their own gear and facilities. Draft fishermen working directly for the companies used the same techniques and followed almost the same procedure, except that the tasks were divided between them and the shore-workers. In the evening, two or three shore-workers set the nets, which they moored to the company's buoys. Early the next morning, the fishermen went to raise their nets (one each). Then they would return to shore, toss the nets on the beach and go for breakfast. Meanwhile, the shore-workers took the herring out of the nets and pooled the catch, which was then divided up equally among the fishermen by the beach-master. The shore-workers were responsible for putting the nets on the drying racks.

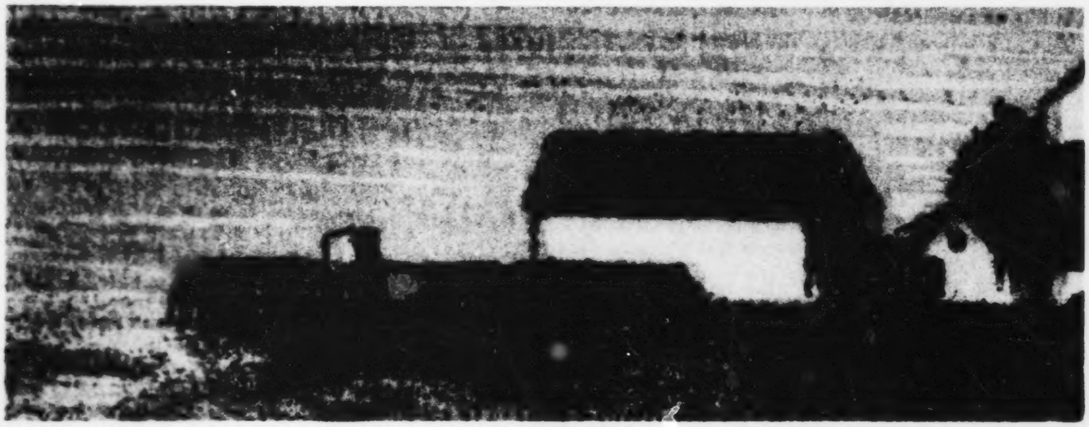


Figure 33. Net-drying racks on Fruing beach establishment, 1866. Stage-head and splitting cabin are at left.

The 18th century. In the 18th century, a floating gillnet moving "en ravoir" or against the current, was also used for herring, mackerel and capelin.[6] These nets were used in the same way as the 20th-century herring net. They were put out in the evening at the mouths of coves and raised the next morning.[7] They were also used for driftnet fishing.

The 19th century. As inspector of the Gulf of St. Lawrence fisheries, Captain Fortin observed the same method of fishing for herring with a net put out close to shore. He commented that the fishermen could harvest from five to ten barrels of herring per net when fishing was good. At that time, the seine (100 to 130 fathoms) was also used for herring fishing, but mostly by Americans and Nova Scotians, as it was too expensive for the French-Canadian fishermen.[8]

Driftnet Fishing

After the spawning season, in mid-July, herring became scarcer in Gaspé Bay; this was when the fishermen from Grande-Grave went driftnet fishing. This was done at night, and the men would rest only on Saturday evening. They left shore at about midnight, sometimes having

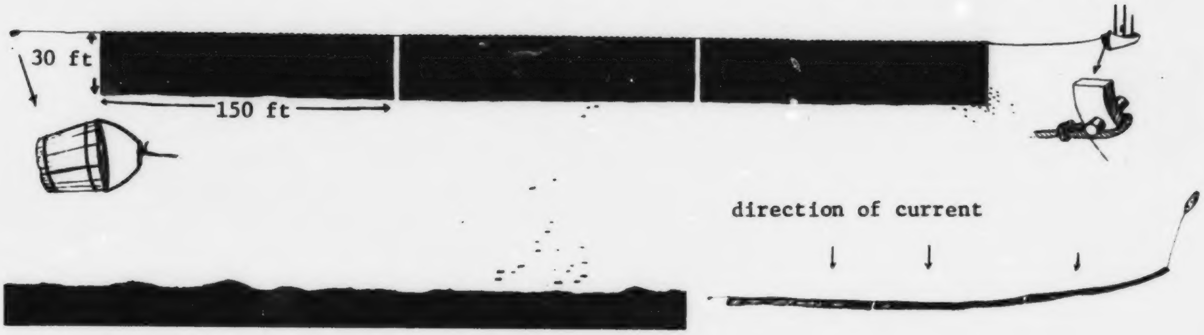


Figure 34. Driftnet fishing.

just finished splitting and salting that day's catch. As there was always a two-man crew, they would take turns at the helm so that one of them could sleep for a while in the cuddy.[9]

The gillnet described in the preceding section was also used for this kind of fishing. Usually, two to five nets were joined to increase the chances of taking fish (Fig. 34). The headline was reinforced with a stopper cable (or a hawser) that linked the nets together and the extension, about 15 fathoms long, was secured to the stem of the barge (Fig. 34). The sails were lowered and a lantern was hung aloft. The barge was allowed to drift with the wind and the current, taking the nets with it. To keep the nets well stretched out and far enough from the barge, some fishermen attached a pail to the last net.[10] In Gaspé Bay, fishermen had to keep a close watch while driftnet fishing because of the currents. The principle of driftnetting in Gaspé Bay consisted in allowing the boat to be swept along by the bay current, which runs toward the gulf. However, the fishermen had to watch out for the cross-currents, and stay about midway in the bay, making sure that the barge did not drift toward shore and that the nets could not hook onto the bottom.

Generally, the fishermen would float fairly far toward the mouth of the bay to be sure they could drift slowly out of the bay toward the fishing banks. In the morning, they hauled all their nets on board, took out the herring, and cut it up on their way to the fishing grounds. After the nets were emptied, they were put to dry on a sprit that had been set between two masts. If it was raining, the nets were rolled up and sprinkled with salt to prevent their heating.

In the company beach establishment, the shore-workers were responsible for seeing to the nets. They would go from barge to barge at night, distributing the nets among the fishermen; the nets were entirely the responsibility of the fishermen while they were driftnetting.

In the section on seining for sand lance, we will see that the men who were engaged in this pursuit went driftnetting only on Sunday evening so that they would not miss Monday forenoon's fishing.

Seine Fishing for Sand Lance

Gaspé fishermen went seining for sand lance for about one and a half months in midsummer after the herring left the bay. The American sand lance (*A. americanus*), a small fish of the family Ammodytidae found on sandy bottom (Fig. 35), constitutes a significant part of the diet of cod and haddock.[11] In the Gaspé Bay area, it could be found near Sandy Beach, Douglastown, Cap-aux-Os, Penouille and Rosebridge. Schools of sand lance can still be seen today throughout the summer coming and going in the fishing coves, trying to escape the mackerel.

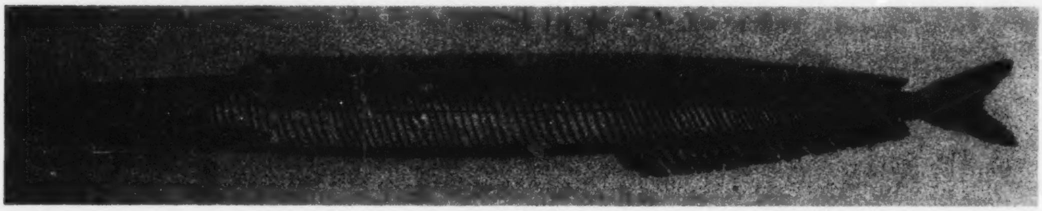


Figure 35. American sand lance (*Ammodytes americanus* DeKay).

The seine. The seine used for sand lance was about 150 ft long by 12 ft deep. Each of the wings was about 60 ft long and the pocket or bunt was about 30 ft long (Fig. 36). The mesh in the wings was about an inch and a half wide, while the double mesh in the pocket was barely wide enough for a pencil to go through. The headline had cork floats on it at regular intervals to keep the seine upright. The footline was shorter so that it could be drawn to form a pocket or purse for hauling the fish, and it was weighted down with pieces of lead to keep it on the bottom. At the end of a line attached to the middle of the headline there were two or three pieces of cork floating on the surface, used as markers or buoys, also for hauling in the seine. The wings were rectangular; to each end was attached a 50-fathom cable, used to haul the seine into shore.

Seining crews. It took seven men to handle a seine, so the men took turns going out together. A few men banded together and bought their own seine, but usually this gear was owned by the company. The gear was very expensive, and most of the fishermen too cash-poor to afford it. The company charged a dollar or two per man for the season and organized five seven-man crews, one for each weekday. No fishing was done on Sundays; accordingly, there was no seining on Saturdays. Crew rotation was determined by drawing straws. It was advantageous for a fisherman to participate in the seining, because it assured him the daily ration of bait he needed for cod fishing. On the other hand, the members of a seining crew lost half a day that they could have gone fishing for cod. Another half-day could be lost on Monday morning, since no fishing was done on Sunday, so many fishermen went driftnetting on Sunday night.

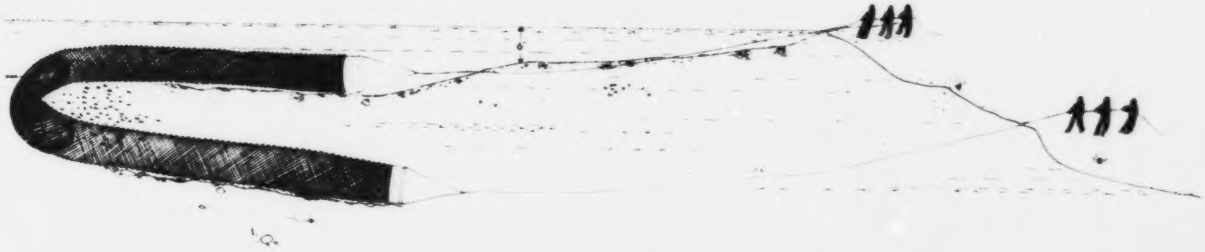


Figure 36. Sand lance seine.

The whale boats. The fishermen went out to the seining grounds in a whale boat. This craft was similar to that used for whaling, which explains its name. The seining crews were called "la balinière à Fruing" or "la balinière à Hyman." The whale boat was shallower than the Gaspé boat and had a second stem instead of a sternpost. The stem and stern were rounder than in the Gaspé boat and less likely to hook onto objects, making the craft more manoeuvrable above the seine.[12]

The technique. The crew consisting of six rowers and one "maître de seine," or captain, left as the tide came in. When they approached a sandy beach - this being a beach-seining expedition - some of the men would get out of the boat, go on shore and hold the cable of one of the wings. The captain and the other men still in the whale boat would spread the seine out in a semicircle and pull the cable of the other wing in to shore. The seine was then hauled ashore by three men at each end, who beat the water with the cables to direct the sand lance into the seine. The captain stayed alone in the boat, unhooking the seine when it got caught on the bottom. When the seine was near shore, the headline and footline were drawn, making a pocket to haul the fish in. The seine was then emptied with pails or landing nets. Some fishermen said they had caught as many as 30 barrels of lance in a single seining.

The day's catch was then distributed evenly among all crew members, including the captains. Every man got his share of bait, which means that every two-man barge received two rations. One pail of bait was enough to bait a line for a whole day. If there was any left over, it could be given to other fishermen, whose luck had not been so good. After being used, the seine was cleaned and hung out on a drying rack (Fig. 33).

Seine Fishing in the 18th and 19th Centuries

In his *Traité des pesches*, Duhamel Du Monceau described how seines were used by 18th-century fishermen in northern America in fishing for bait. Capelin, herring and mackerel were the main species taken in this way. Seine fishing became the permanent occupation of some crews of fishermen. Two "capelanières" or "boetteuses" were used, with four or six men to a boat. Each boat had part of the seine, which was spread out in a semicircle. The flats were supposed to bring a regular supply of bait to the "chaloupes pêcheuses" (cod fishing boats) and bring the catch of cod back to the stage. In this case, the boats ("serreuses") were said to be engaged in lighterage. Bait seining could also be done from shore (Fig. 37). In his mid-19th century reports on the Gulf fisheries, Captain Fortin mentions that sand lance were used for baiting cod lines.[13] He also mentions that the sand lance seine was used, but only on the North Shore.[14] He also found 12 capelin seines at Grande-Grave in 1865, 1866 and 1867. It seems, however, that in the 20th century, capelin, unlike sand lance, has not been fished systematically. On the whole, our respondents led us to believe that capelin could be used as fertilizer and that some people kept it in brine and only occasionally used it as bait. The failure to use capelin as bait is probably explained by the abundance of herring in the bay in the period under study; Grande-Grave fishermen considered herring the best bait for cod fishing.

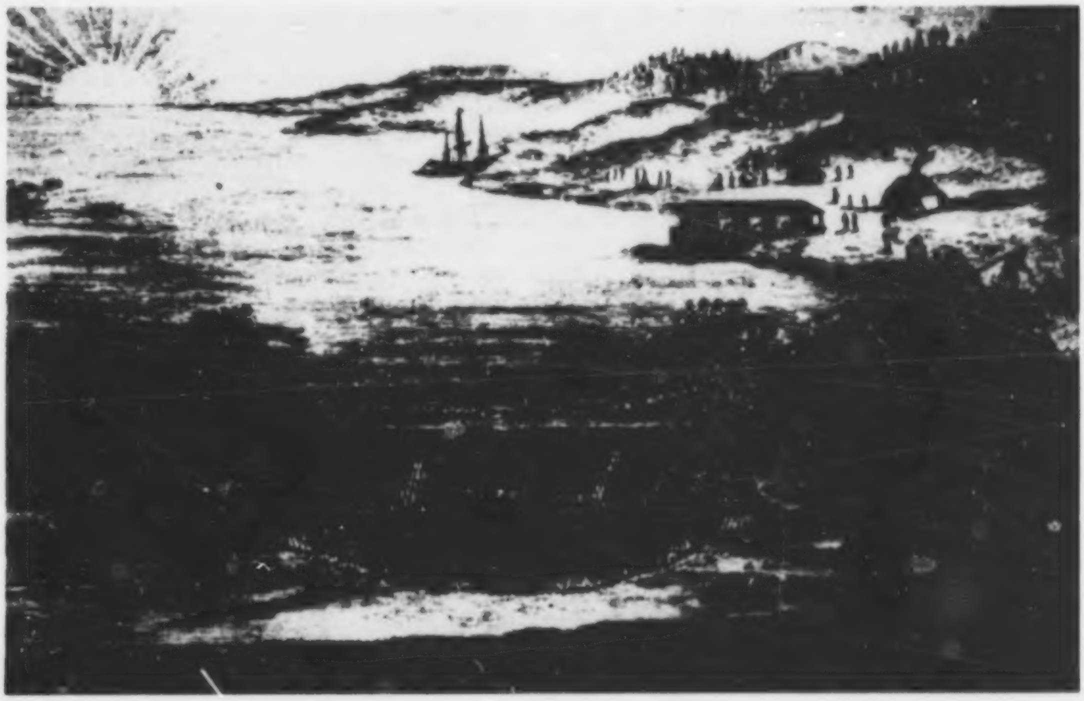


Figure 37. Bait seining in the 18th century.

Squid Jigging

The jigger. The squid is a cephalopod mollusk (Fig. 38). Gaspé Bay fishermen caught this species in autumn. It was considered excellent bait because it held firmly onto the hook and therefore could be re-used. Squid was taken in the evening when it approached the shore to spawn, at about three or four fathoms. The cove at Cape Gaspé was a particularly good place to catch squid. The fishermen used a lead lure with a crown of spines, called a jigger (Fig. 39). The jigger was

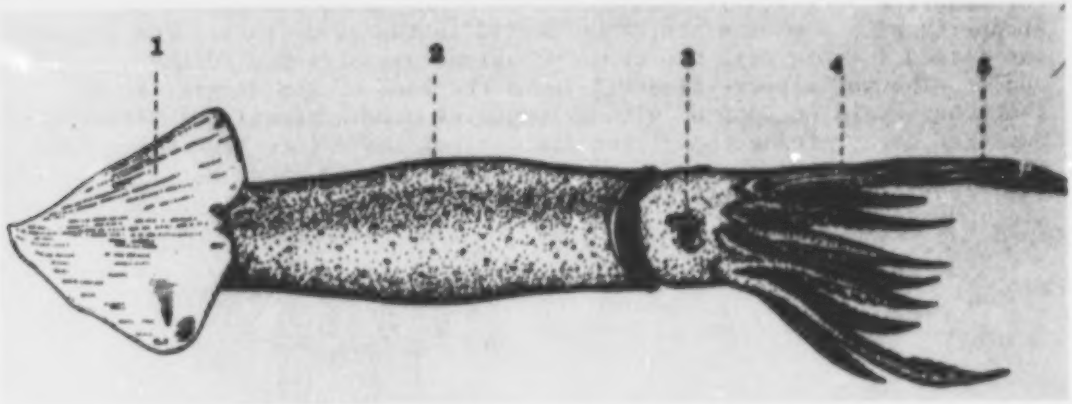
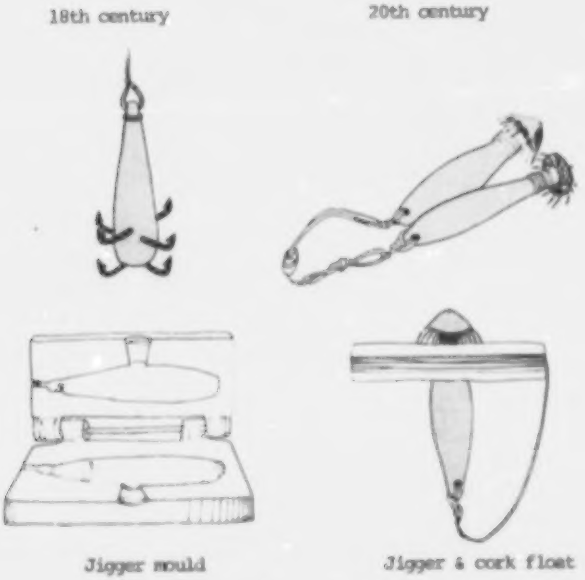


Figure 38. Squid.



Jigger mould

Jigger & cork float

Figure 39. Jiggers.

attached to the end of a three- or four-fathom line. The fisherman, one line in each hand, would move his arms up and down, catching up to three squid, which were attracted by the reflection of the lead in the water.[15] After taking the squid from the water, he would get out of the path of the mollusk's inky spray. The jigger was tied to a snood about a fathom long which was tied to the line, and the fisherman knew it was time to get his line out of the way when he could see the knot connecting the snood to the main line appear on the sheer strake.

The fishermen could get ready-made jiggers at the store, but many men made their own. They used a mould they called a "bonhomme" to cast the lead stem (Fig. 39).[16] When the lead was cast, the mould was stoppered with a wooden pin, then buried in the sand. After the jigger was formed in this way, the crown of spines was attached to the end.[17] The spines were tied all round the head of the jigger, so that they could be bent up with a length of pipe. Finally, a washer was hammered down, giving the jigger its conical shape (see Fig. 40). Some fishermen also made double-crowned jiggers.

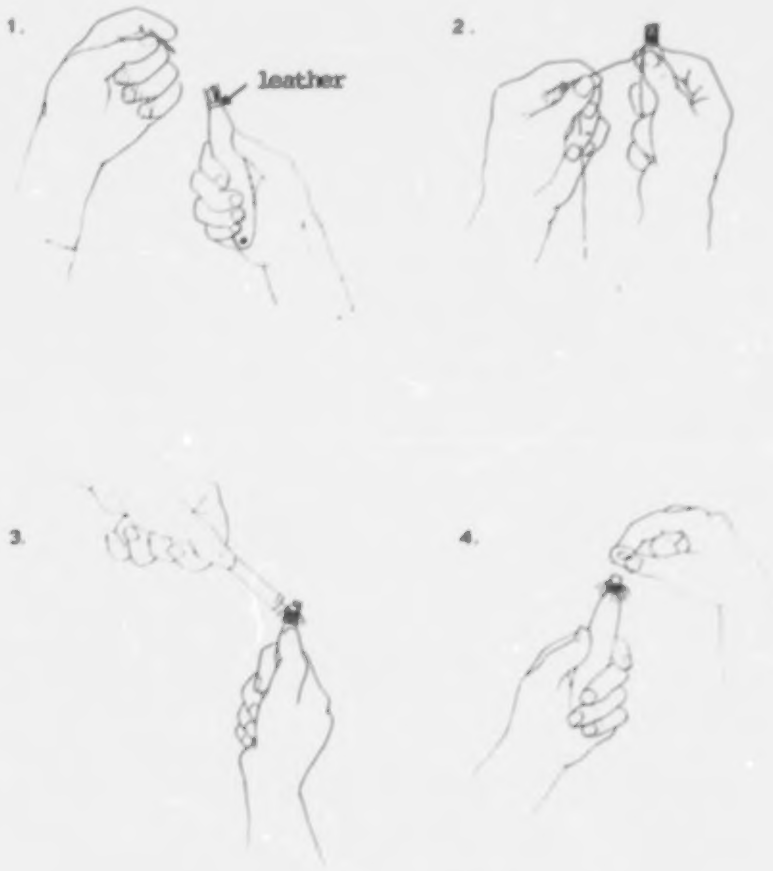


Figure 40. Making a jigger.

The hoop. There was another piece of equipment for catching squid. This was an iron hoop to which pieces of red flannel were tied (Fig. 41). The squid, attracted by the cloth, hung onto it. When the hoop was removed from the water, another fisherman took in the squid with a dipnet before they could let go. This method illustrates the ease with which squid could be taken. Some fishermen told us that they had had success with a mop dipped in the water. Others liked to tell us the tale of how one of their group had used his shaggy dog to catch squid!

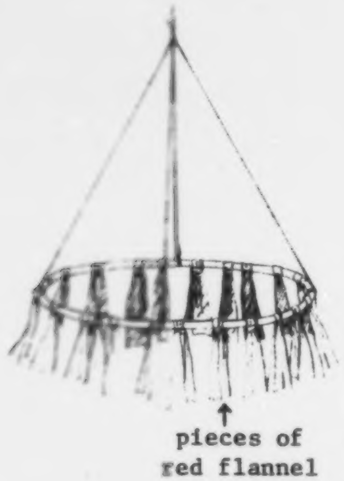


Figure 41. Squid hoop.

Squid fishing in the 18th and 19th centuries. Du Monceau wrote in the 18th century that squid was a most effective bait for cod.[18] He also mentioned that Provençal fishermen used gear similar to the jigger (Fig. 39) for catching "sêches," including "calamar" [squid].[19] He also described how fishermen would light fires on the beach at night to lure the squid up on to shore, and they gathered them at dawn.[20]

In his reports, Captain Fortin noted the use of jiggers for taking squid and commented that the fishermen could obtain ample squid in one evening for the next day's fishing.

Other Species Used as Bait

Herring, sand lance and squid were the main bait species used at Grande-Grave in the first part of the 20th century. The cod season depended on the migratory patterns of the bait. Herring came in spring, sand lance in summer, and squid (and herring again) in fall. However, these fishes and mollusks were not always evenly distributed. If one of these species came late, in small numbers, or not at all one year, the fishermen had to use different species to bait their lines.[21]

Capelin. As we mentioned earlier, in discussing seine fishing, capelin were infrequently used as bait in Gaspé Bay (Fig. 42). They were picked up on the beaches when the waves broke and used as fertilizer or food.

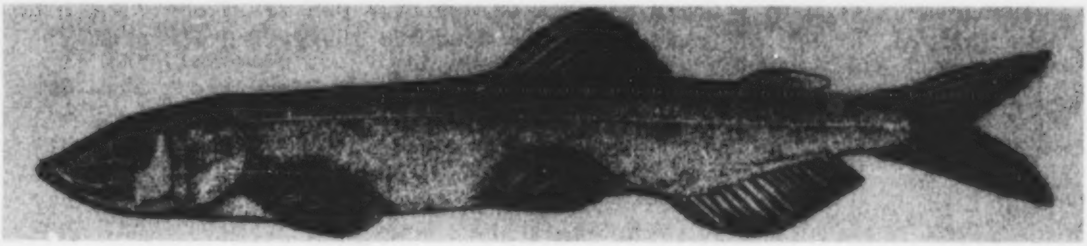


Figure 42. Capelin (*Mallotus villosus* Müller).

Mackerel. In late July and early August, the Atlantic mackerel (*S. scombrus*) would make its appearance near the coast and stay for about three weeks.[22] The fishermen would take it in a driftnet, using the same type of net as for herring, except that the mesh was wider-spaced (3 in.) and the cloth was only three fathoms deep.

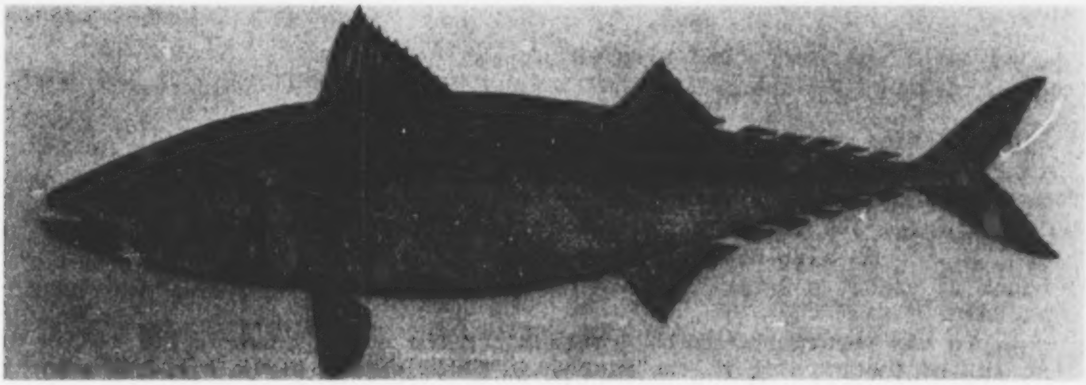


Figure 43. Atlantic mackerel (*Scomber scombrus* L.).

Smelt. This fish was also used occasionally as bait in the fall in Gaspé Bay. It was caught with a gillnet. Later we will see that when bait was scarce fishermen also caught cod with a jigger, that is, a lure (Fig. 52).

Clams. In the "fag out" of August, clams could be taken in the waters near Douglastown and Sandy Beach (Fig. 45). Grande-Grave fishermen would cross the bay and shovelling through the sand, take three or four quarts of clams at each tide.[23]

Figure 44. Rainbow smelt (*Osmerus mordax* Mitchill).

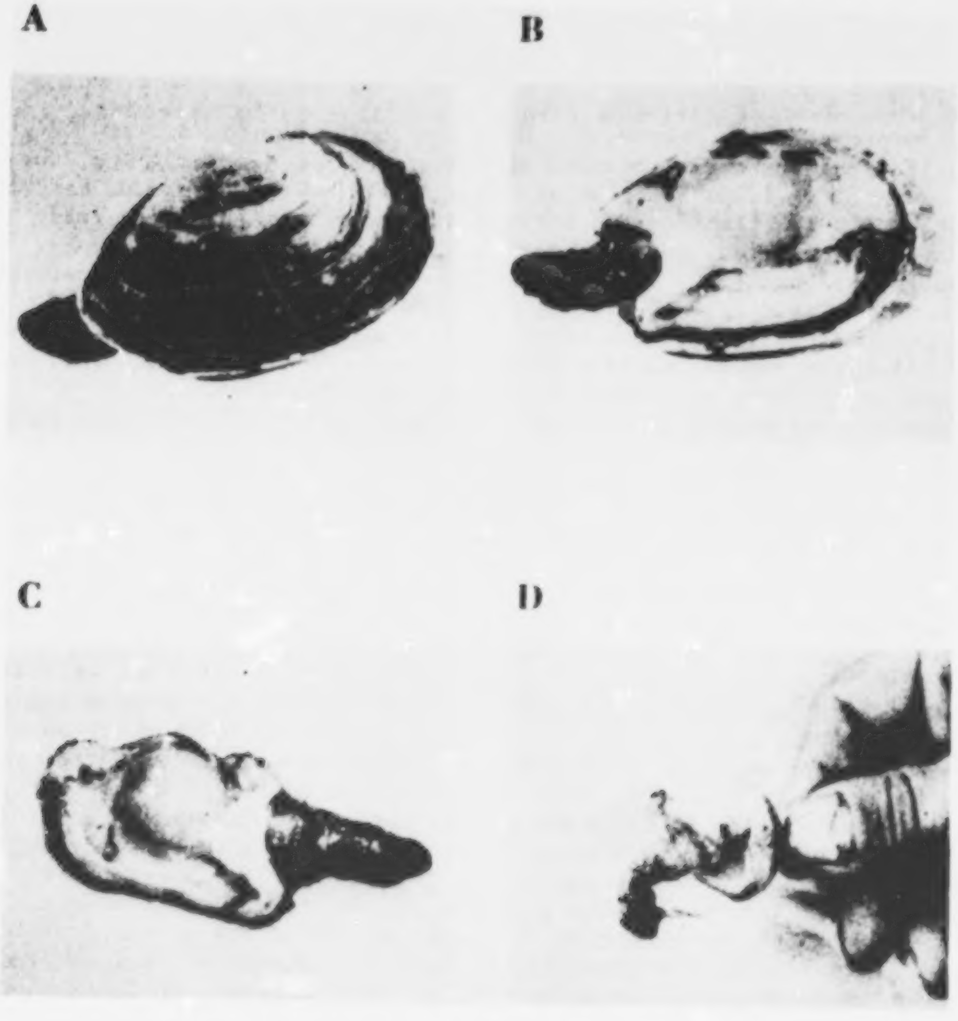


Figure 45. Long-neck clam (*Mya arenaria*).

Bait in the 18th and 19th centuries. We have seen that herring, capelin and mackerel were the main species used for baiting cod lines, but sardine, alewife and cockle were also used.[24] Cod innards were used for fishing on the Grand Banks when other bait was lacking.

In the 19th century, Fortin also recorded the occasional use of long-neck clam, smelt and mackerel in the absence of choicer bait. He constantly bemoaned the fact that the fishermen were not interested in catching mackerel, thus leaving the field to the Americans, who made money by fishing this species in Canadian waters throughout the 19th century. The Americans fished from their schooners with seines, but especially with lines. Some of our informants remembered having seen American fishermen working their seines in Gaspé Bay at the turn of the century.[25]

Cod Fishing

The hand line. In the early 1900s in the Gaspé, cod was taken one by one or two by two with a hand line. The limitations of the gear required the fisherman to spend many hours at sea - often a whole day - to bring back his daily catch of cod. Another disadvantage of hand line fishing was that it required a great deal of bait. We have already examined the various methods of taking bait. The fisherman's only advantage in hand-line fishing was that the gear was cheap and easy to use, making this type of fishing accessible to all.

Salmon fishing, on the other hand, was not for everyone, because the nets were expensive. The hand-line method was profitable for the companies, because for every line there was a fisherman who was a potential consumer of goods from the company store. The more fishermen there were, the more production could increase and the more goods were turned over to the fishermen as wages.[26]

The hand line had seven parts: a main line, a weight or sinker, a pin, a ferrule, snoods, twisted wire and hooks (Fig. 46). The main line was rolled around a reel. The amount of line the fisherman let out depended on the depth of the water in which he was fishing. At the turn of the century, the lines were made of hemp; later, they were made of cotton. They were 50 fathoms long. The fishermen used the line to gauge the depth of the water; thus, fishing at 25 fathoms was called halfline fishing, and at 100 fathoms, it was called double-line fishing. The line was attached to the sinker by a leather thong that was more wear resistant than the main line. The sinker was a piece of lead which the fisherman cast himself (Fig. 47) or bought by the pound at the store. For fishing in Gaspé Bay, where the current is weak, the fisherman used a two-pound sinker; off Cape Gaspé, where the current is stronger, he used a four-pound sinker to keep the line as plumb as possible. At the base of the sinker a pin was inserted. This was a piece of straight or bent iron wire that separated the snoods from the line. Formerly, in the place of the iron pin, pieces of line were used, wrapped round with line from the reel to stiffen them. At the end of this pin there was a ferrule to which two snoods of different lengths were attached. At the end of each snood was some twisted line and the

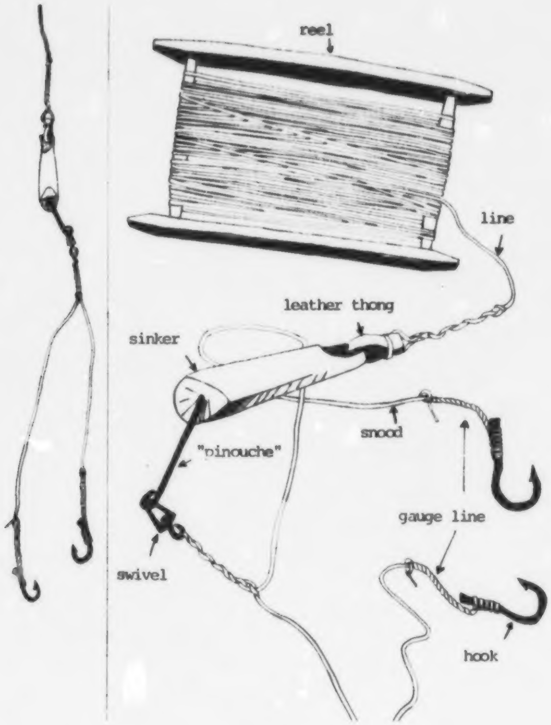


Figure 46. Hand line and reel.

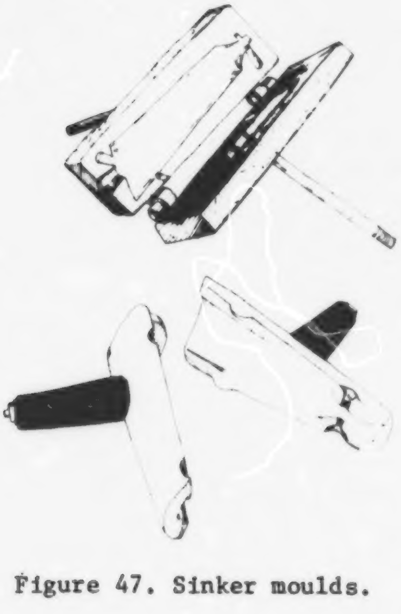


Figure 47. Sinker moulds.

hook was connected to this. The fisherman kept some spare twisted lines around in case the fish carried them off. The hooks were curved, with a flat-tipped shank. The herring, the most frequent bait fish, was cut as follows: first the head was cut, then the fish was split lengthwise and diagonal pieces were cut from it (Fig. 48). When sand lance was used, it was bent over before being put on the hook because its flesh is oily and fragile.

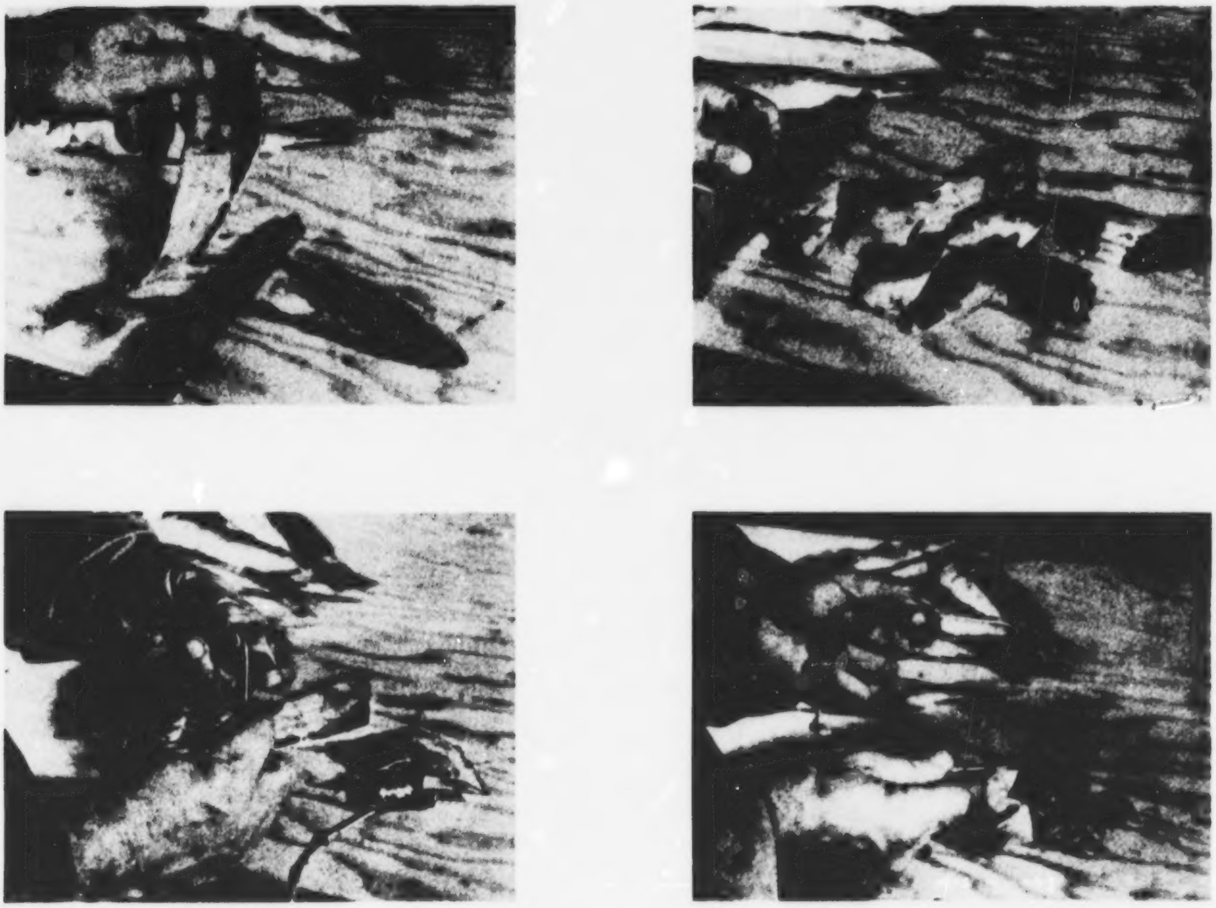


Figure 48. Cutting and baiting the herring for hand line.

A fishing day would start at daybreak, right after the herring nets were taken in. The men sailed or rowed to the fishing grounds.[27] Each man found his mooring places by means of landmarks, as mentioned earlier. At the selected spot he would cast anchor and lower the sails and masts. There were usually two men to a barge, one fore and the other aft (the barge-master). Each man used two lines at a time, one on either side of the boat. As he hauled in one line, the other was attached to a tholepin with a knot that could be untied easily when the cod had bitten. As cod is a groundfish, the fisherman would play out the line to touch bottom, then pull it up one fathom. He would go from one line to the other and when the cod bit he was constantly pulling on the lines and baiting them again. In order not to cut his hands in continually pulling on the lines, he would wind a strip of cotton called a nipper (Fig. 49) around each hand.

A good fisherman did not haul up his line immediately after the cod bit. If the fishing was good that day, he could hope to catch another a few seconds later, and in this way he could catch a "ramée" of cod. Fishermen are referring to this technique when they say that the lazy fisherman has better luck. On a good day, two men could catch 600 codfish with hand lines; the usual catch for a skilful crew was eight to ten drafts a day.

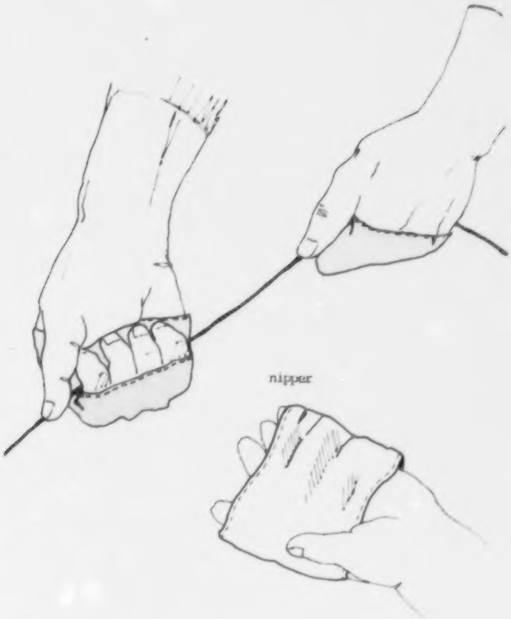


Figure 49. Working the line.

The old way. The use of the hand line for cod fishing goes back to the first Europeans fishing in North American waters in the early 1500s. The illustration of a hand line found in Du Monceau's *Traité des pesches* shows a piece of gear assembled according to the same principles as the one used in 20th-century Gaspé (Fig. 50). The old line generally had a single hook; if two were used, the line was said to be "ramée."[28]

Several authors have described this method; Captain Fortin's 19th-century account coincides with what our respondents told us.[29]

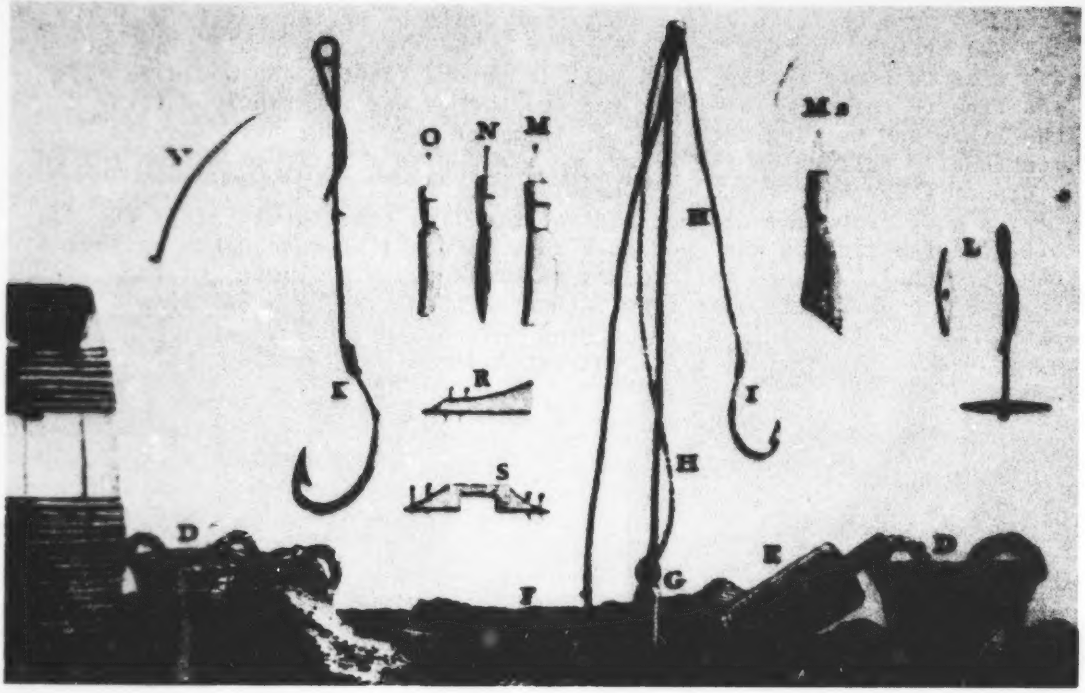


Figure 50. Eighteenth-century hand line.

The bob. The bob, a shorter version of the hand line, was used for catching fish near the surface. It was a cylindrical sinker with a single snood and a single hook attached to it. This gear was connected to a line about ten fathoms long (Fig. 51). Surface bob-fishing was one way of adapting to the codfish's vertical movements (see the chapter on the codfish). Since the line was shorter and the sinker lighter than in the regular hand line, bob-fishing could yield good results in a short

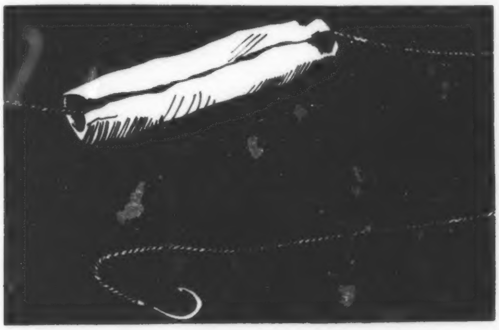


Figure 51. Cod bob.

time. When cod were plentiful the fisherman would not even bother removing the hook by hand; he would toss the cod into the barge, and the hook would come out by itself.

Although "bob" literally means "a short, quick up-and-down motion," the cod bob was used like a hand line rather than being jerked, because the bait was what attracted the cod. "Jig" has a similar meaning to "bob," and the fisherman's "jigger" is more aptly described by the definition given here, for it was a lure that replaced the bait and that was in fact jerked up and down to attract the cod.

The jigger. The jigger was also used to take cod, when bait was in short supply. The lure was a fish-shaped lead four or five inches long weighing about a pound to a pound and a half (Fig. 52). The line was attached to the jig tail and one or two hooks were inserted into the lure's "mouth." The line was jerked up and down in a short, quick motion to catch passing cod - in other words it was "jigged," hence its name.[30] The modern version of this piece of tackle is the Norwegian jigger used today by occasional fishermen in the Gaspé (Fig. 53).

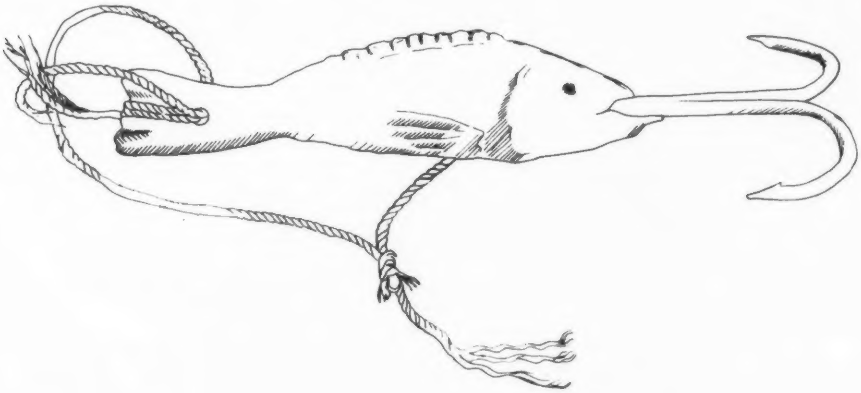


Figure 52. Lure (jigger).

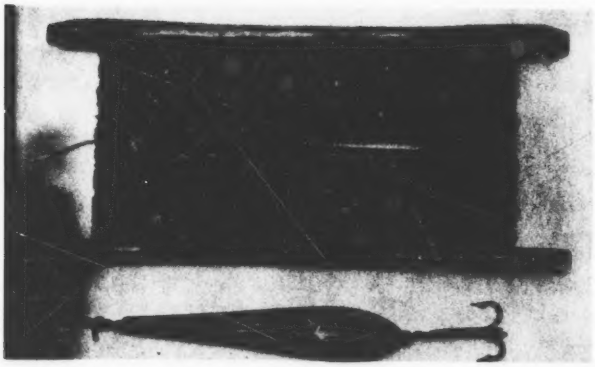
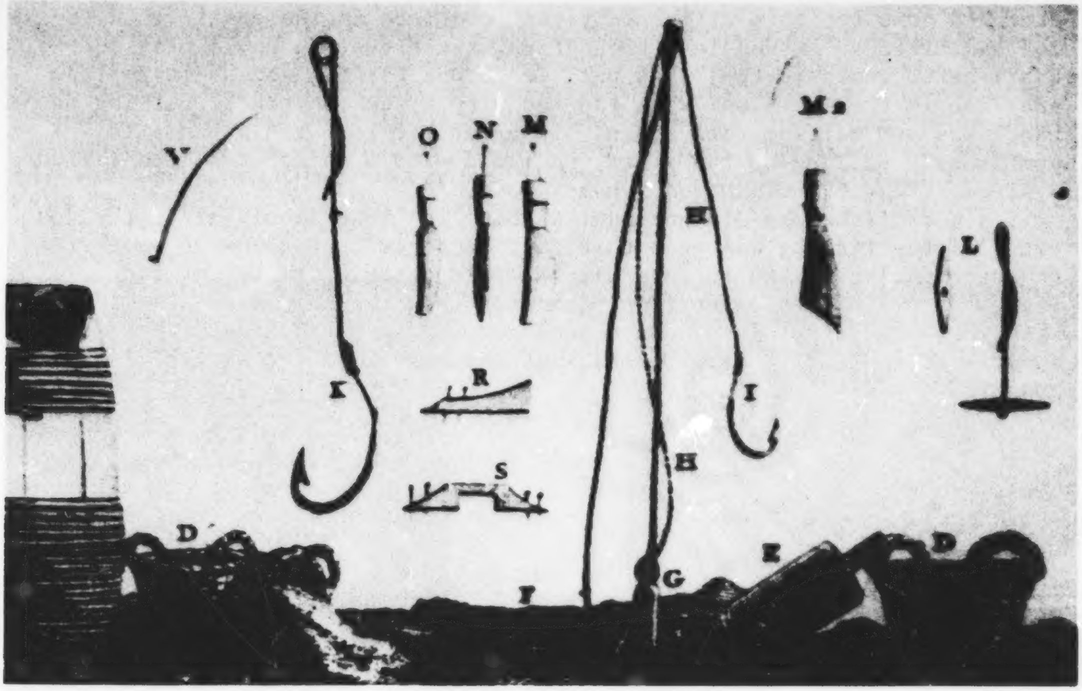


Figure 53. Norwegian jigger.



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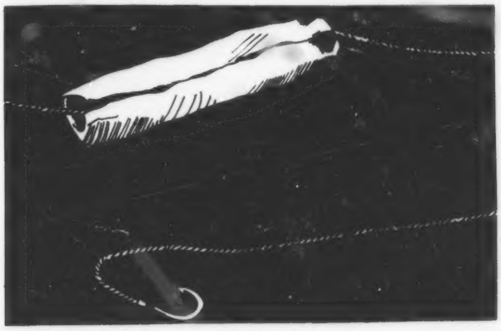

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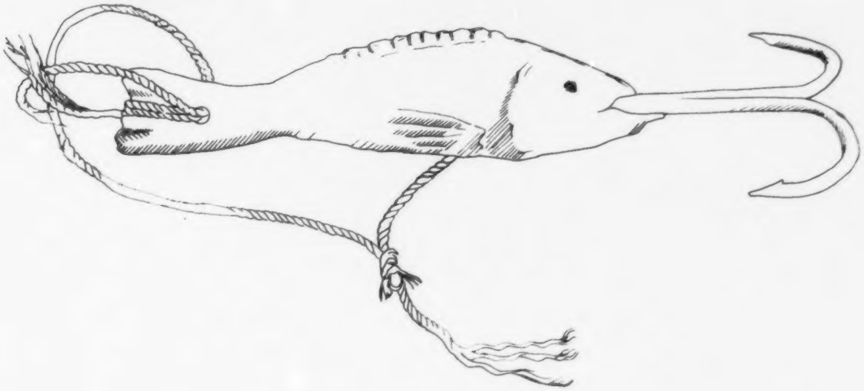

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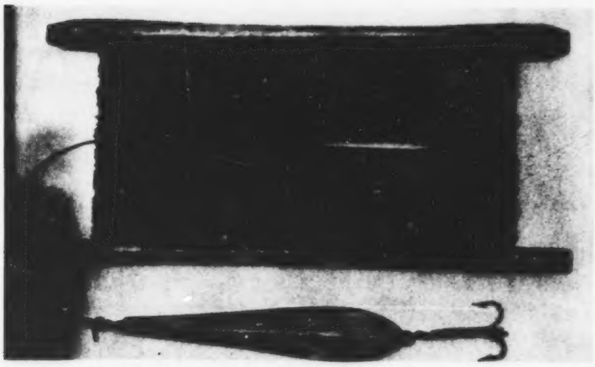


Figure 53. Norwegian jigger.

Jigging in the 18th and 19th centuries. Jigging was also practised in the 18th century; it was banned because it was believed that cod injured by the hook would swim away and frighten away the rest of the school.[31]

In the 19th century, Fortin also observed that jigging was practised when bait was scarce.[32] He added that the method was infrequently used, however, and that it seemed relatively unproductive and more tiring for the fisherman.

Processing Cod

Splitting

Processing cod required few steps, but each required special care. The way in which the fish was split largely determined the quality of the finished product. Because this step was so important, it was only fair that the job was usually given to the most experienced man in the family group or the skilled worker in the company. In this chapter, we will describe the tools and steps in processing, and then discuss the way the various tasks were allocated.

Equipment. The only equipment needed is a splitting knife, a throating knife, a heading knife (optional), a splitter's mitt or glove, a few containers (such as the barrows in Fig. 61), big and small tubs (Fig. 68), and pails for the cod tongues and livers.[1]

The process. Cod dressing is a three-step process carried out by three people (Fig. 54): the throater, who cuts the cod's throat and rips its belly open; the header, who guts the fish and cuts off its head; and the splitter, who splits the cod open. The dressers can be stationed at various points around the splitting board, but the header and splitter usually face each other (Figs. 54 and 55), facilitating the logical movement of the process (see Fig. 56). The throater holds the jaws of the fish closed with his left hand and turns it on its back, thus opening the gills and exposing the throat. The throater has a double-edged knife (Fig. 57). He uses one side to cut the fish's throat and the other to rip its belly open. Then he gives the fish to the header. This worker opens the belly with one hand, and with the other removes the liver and puts it into a tub. Then he loosens the guts and pulls them out. After doing this, he rests the cod on its neck against the edge of the board and breaks its head.[2] Finally, he hands the cod to the splitter with the belly facing him and the tail pointed right. The splitter then props the fish against a cleat on the board to start the splitting proper. The splitter's knife has one cutting edge and is slightly curved, making it easier to remove the backbone without damaging the flesh (Fig. 57). The splitter seizes the fish by the nape in his gloved left hand and makes a first cut all the way to the tail. With the second cut he slices through the backbone, which he grasps in his gloved left hand, slips the knife underneath and removes. A good splitting job can be recognized by the precision of the second cut, which slices and removes the backbone, also removing any blood left in the neck area from heading. A properly cut backbone leaves a figure 8 at the cut end (Fig. 58). Cutting through where the fish is stained with blood from heading is called "tranche au sang." The signs of a good splitter are, therefore, speed and accuracy.

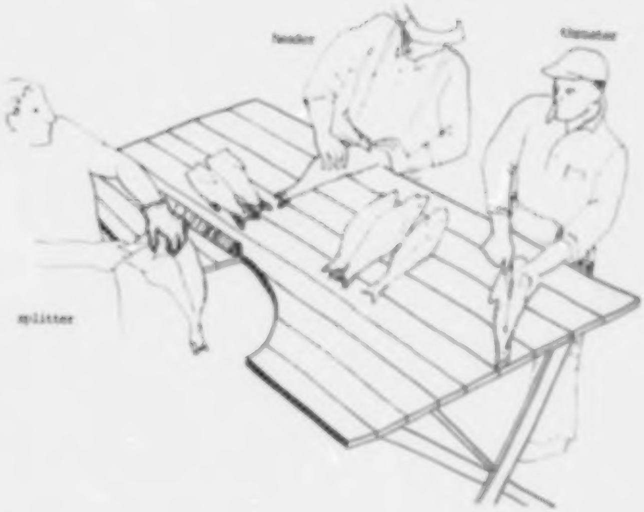


Figure 54. Splitting board.

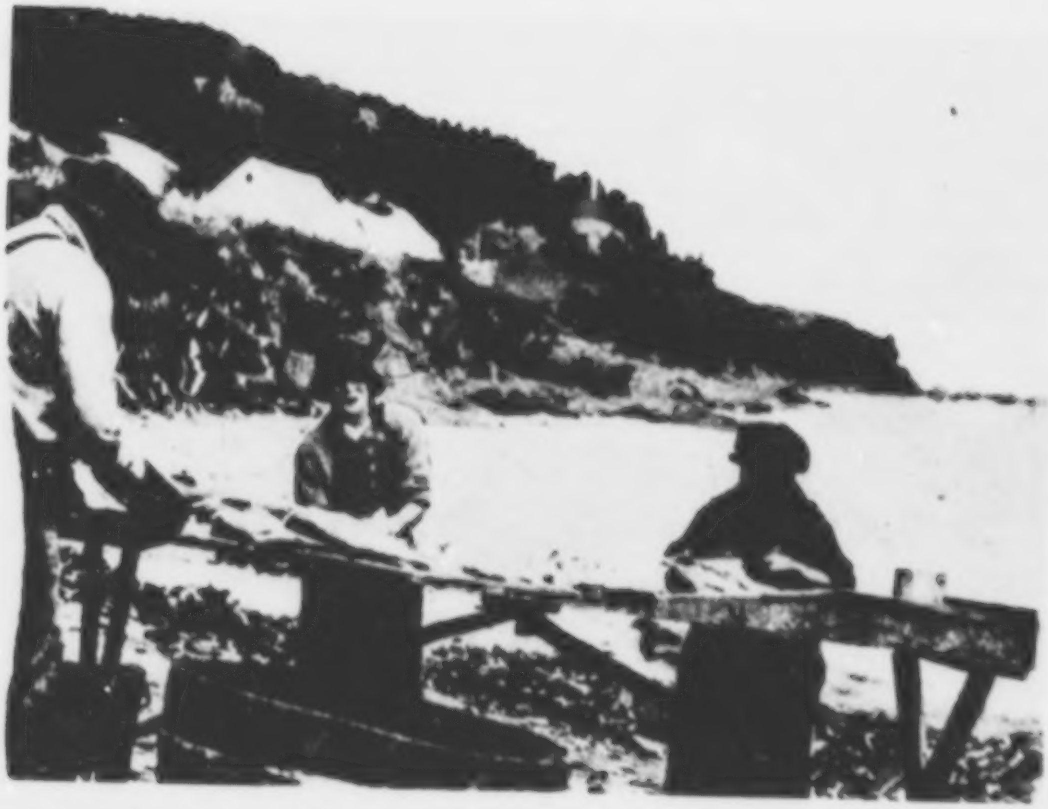


Figure 55. Splitting cod at Forillon in the early 1900s.

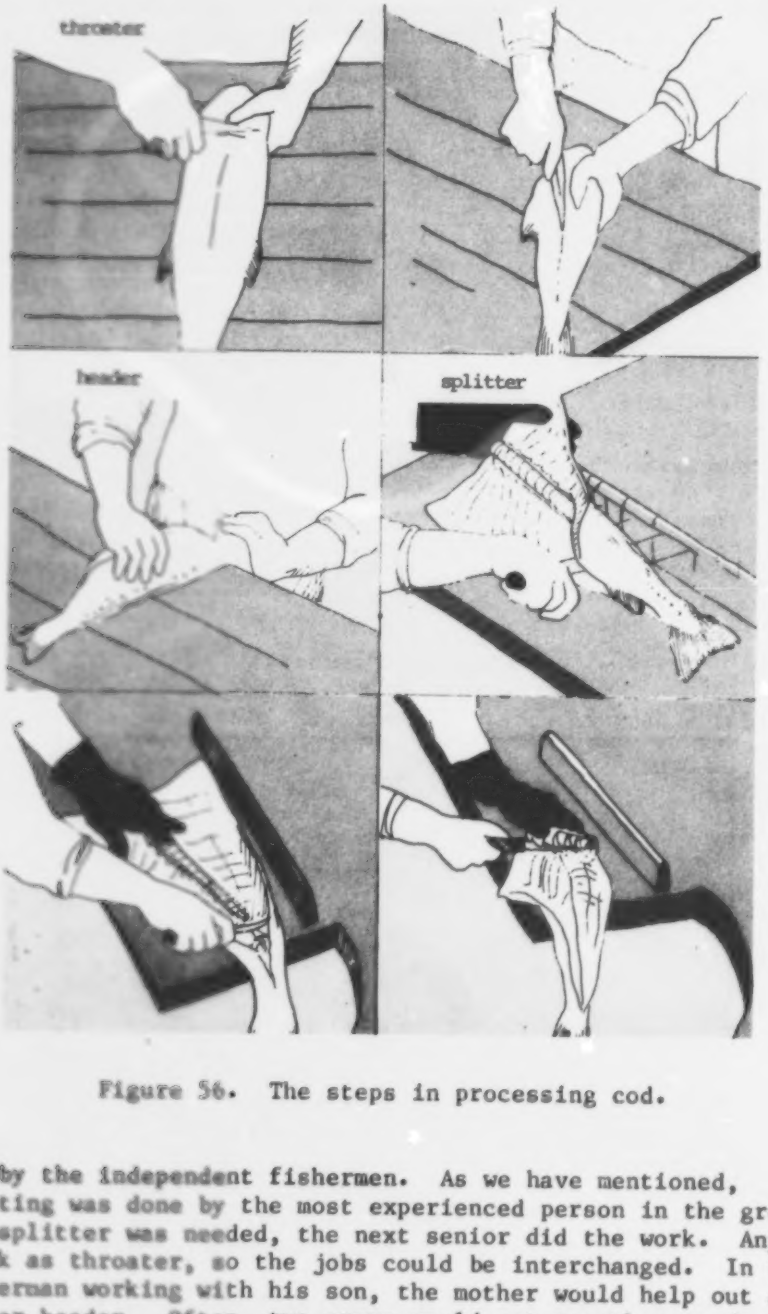


Figure 56. The steps in processing cod.

Dressing by the independent fishermen. As we have mentioned, the splitting was done by the most experienced person in the group. If a second splitter was needed, the next senior did the work. Anyone could work as throater, so the jobs could be interchanged. In the case of a fisherman working with his son, the mother would help out as throater or header. Often, two crews would get together to dress their catch together. In this case, three of the four men would work as throater, header and splitter, while the fourth did the salting.

Dressing in a company establishment. The companies employed skilled workers to do the throating, heading and splitting. These men

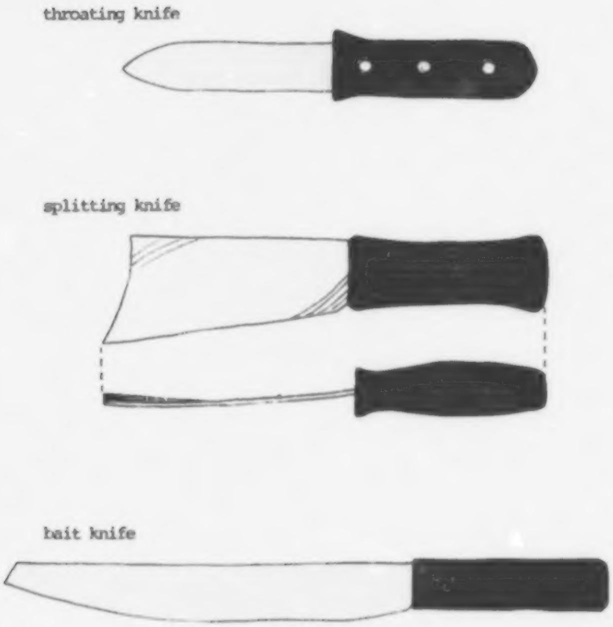


Figure 57. Knives.

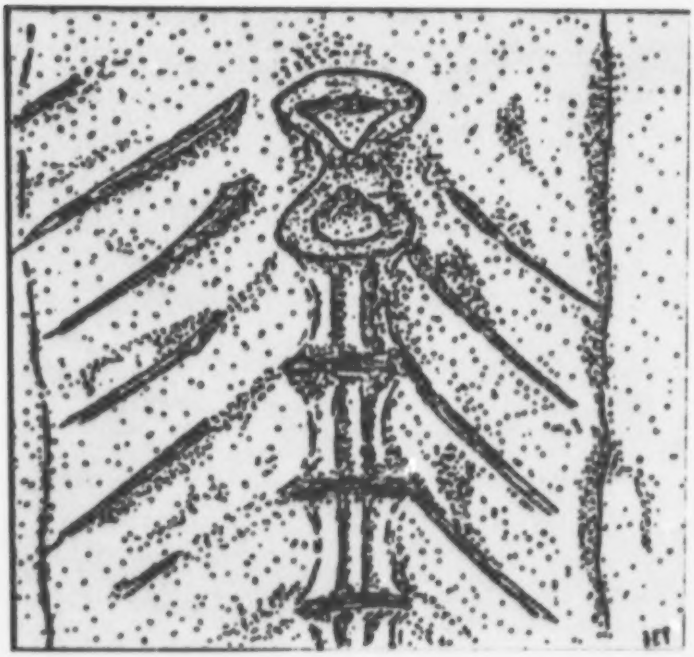


Figure 58. The figure 8 appears where the cod's backbone is sectioned during splitting.

could also be distinguished from the other shore-workers by their higher rate of pay. In the early 1900s at Grande-Grave, the company's dressing work was done in the splitting cabin on the stage-head (Figs. 3 and 33). Inside the cabin there were two splitting boards, each with a splitter, a throater and a header.

There was an opening in the cabin facing the sea, through which the porters passed the newly arrived cod to the throater. When all the dressing work was finished, the splitter would toss the cod into a barrow at the end of the board. When the barrow was full, he would shout "barrow!" as a signal for two porters to fetch the cod and take it to the salter.

According to some old fishermen, the splitters employed by the companies worked long, hard hours, as they had to wait for all the barges to return before they could leave work, and the last barge would often come in late at night.[3]

Dressing cod in the 18th and 19th centuries. The process just described was used in the 18th and 19th centuries (Fig. 64). Among the Frenchmen who came for the fishing season in the 18th century, the job of splitter (dresser) was reserved for the crew members, while the ordinary seamen did the fishing and shore work.

First Washing

After the cod was split, the splitter threw it into a tub of salt water beside the splitting board. Before the fish was sent for salting, it was washed to remove the blood left from splitting (especially around the neck and backbone). The fish was also whitenaped. To do this the dark inner skin at the napes was removed. In company establishments, in the period when cod was split in splitting cabins on the stage-head, fish was apparently not washed after splitting. After the stage-head system disappeared, the cod were washed in running water.

From 18th- and 19th-century descriptions, it seems that fish was not washed after splitting, but it was thoroughly washed after salting, as we shall see later.

Salting

Before describing the salting process, we shall discuss the characteristics of the type of dried cod produced in the Gaspé. The type of cure can be determined by whether the fish is lightly, moderately or heavily salted.

Gaspé cure. The Gaspé used to (and still does) produce a quality product known as Gaspé cure. Its salt content is low (18 per cent dry weight) and its moisture content is only 35 per cent when dry.[4] The product is fairly hard, amber coloured and translucent. This type of dried codfish is named after the Gaspé because that region is one of the few with the right weather conditions for producing it.

The dry, cool climate of the lower St. Lawrence, along with the prevailing northwest winds, favour the production of Gaspé cure, which used to be (and still is) highly prized in Europe, especially in Spain and Portugal. Some authors believe quite plausibly, that the French fishermen originally saw in the climate of the Gaspé region the possibilities of manufacturing a product having little salt and moisture, easy to transport and capable of lengthy storage.[5]

Salt was delivered to the Gaspé in bulk by Jersey Company schooners. The Gaspé Bay fishermen remember when Robin and Company had enormous storehouses of salt at Gaspé. The salt came from Cadiz, Spain. Considering that it took eight to ten pounds of salt to produce Gaspé cure from 100 pounds of split cod, it is easy to imagine how much salt had to be kept on stock for a single fishing season.

Cod loses 80 per cent of its weight from the time it is taken from the water to the time the finished Gaspé cure is ready.[6] To produce one quintal (112 lb.) of dried cod, therefore, a fisherman must catch 560 lb. of fresh cod. After splitting, the cod loses 40 per cent of its weight, and another 10 per cent is lost through salting out. Finally, the fish loses another 30 per cent as the moisture content is reduced to 35 per cent. Thus, the finished product weighs only 20 per cent as much as the freshly-caught cod.

To produce Gaspé cure, 8 per cent salt in spring and fall and 10 per cent salt in winter must be added to the split cod. Increasing the salt content above 12 per cent brings the possibility of salt burn.[7] The salter thus has only a small margin of error.

Salting in tubs. In the early 1900s, tub or tank salting was the most common method, both in company establishments and in independent ones, but the 19th-century practice of kenching was still followed in the company establishments. For tub salting, 90-gal. molasses puncheons cut in half were used (Fig. 59). These wooden tubs were about 30 in. high and 30 in. in diameter and perfectly watertight. The procedure was as follows. A "coucheur" arranged the cod in a circle, flesh side up. The salter then spread salt over the part of the fish from which the soundbone was removed, including a few of the remaining vertebrae.[8] When the brine was ready, the fish was weighted down to keep it submerged (Fig. 60). The cod was left in brine for two or three days, depending on the weather, and then it was washed, drained and dried.

The salter's art lay in knowing just how much salt to use to stop bacterial growth without spoiling the fish through salt burn. As a result, the oldest, most experienced fisherman, often the head of the family in the independent establishment, did this work, not to save salt, but for reasons of quality control. In the companies, the salter only salted the cod, a particularly unpleasant job that required the man to bend over all the time. The salter could be recognized by his salt-covered clothing. At Fruing and Co., the salting facilities were in a big building ("number nine"); on the ground floor were the washing troughs, the "foncières" (casks) and the tubs, which were made on the second floor (Fig. 68). In the independent establishment, the cod was salted in the stage, which was right on the beach when there was enough room or, as at the Shiphead, atop a cliff. In the latter case, the men

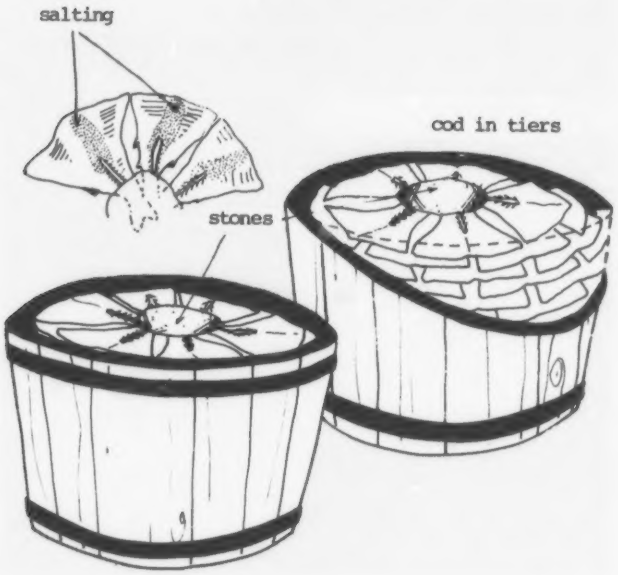
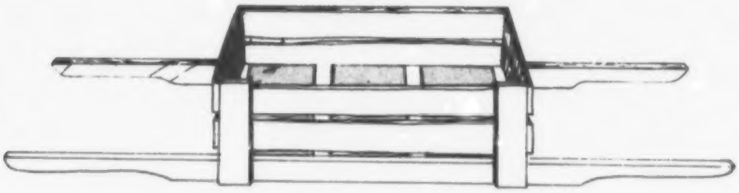


Figure 59. Salting cod.

Figure 60. Cod tubs.

had to lug the barrows of split cod up the cliff (Fig. 61). In the steepest places, a hoist was used (Fig. 27). At the start of every season, the independent fishermen received their salt supply from the Hyman or the Fruing Company, which delivered the salt by boat to each of the coves, either in bulk or in 300-lb. lots.

closed barrow



barrow for dried cod

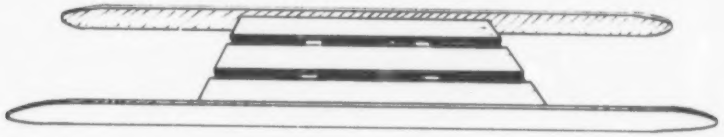


Figure 61. Barrows.

"Kenching." As we have already mentioned, company practice in the early 1900s was still to kench salt cod. The method was as follows. Salt was spread over a large area on the floor; the fish were laid flesh side up and salt was spread over them. Then the next layer of fish was added and salted, and so on. For a light cure such as Gaspé cure, the salt was distributed over only the thick parts of the fish.[9] In this way, piles were formed 3 or 4 ft high by 4 or 5 ft wide by 25 to 30 ft long. To permit the ready escape of pickle, the fish were piled tails out so that the pile sloped downward from the centre outward.[10] The lightly salted cod was left like this for three or four days.

During World War I, the Gorton Pew Company opened a branch, which lasted a few years, at St. George's Cove, the nearest cove southeast of Grande-Grave. This company produced heavy cure "salt burn" cod, as the fishermen called it. The cod was salted in bulk, and was literally covered with salt. It took from 10 to 20 days for the fish to be fully struck. This type of product was not sun-dried and was shipped in bulk on company ships.

In the 18th century, the French fishermen who prepared their dried fish on the Gaspé shores used the kench salting method (Fig. 62).[11] The lightly salted Gaspé cure seems to have originated with the French. In the 19th century, dried cod produced in the Gaspé was also kench salted, although lightly, as Captain Fortin remarked.[12]

Kenching also seems to have been the general practice of contemporary independent fishermen at Grande-Grave.

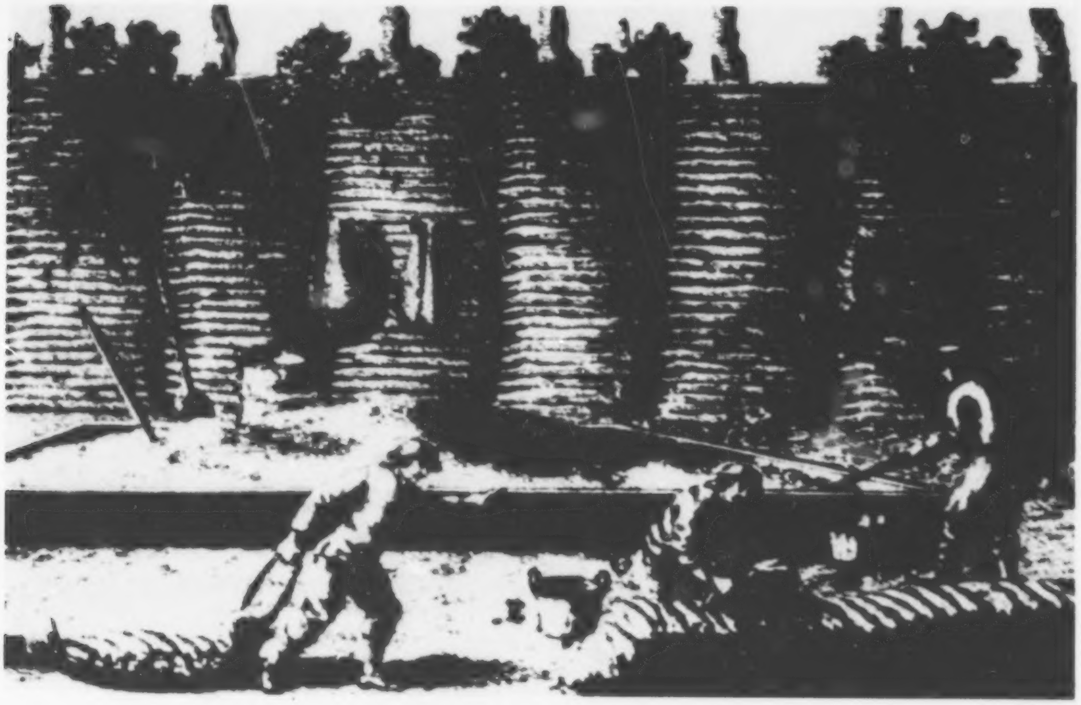


Figure 62. Kench salting in the 18th century.

Second Washing

When the fish had struck after three or four days in brine or kench, it had to be washed again to remove salt sediment, and any remaining bloodstains or black skin. There were two ways of doing this, depending on whether the cod had been kenched or pickle salted. If it had been pickle salted, it was usually washed in its own brine, in a lighter brine, or simply in salt water. In the Fruing Company at the turn of the century, the salted cod was washed in a leakproof trough, which was located in Building No. 9 with the salting facilities. It was a wooden structure, about 15 ft long by 4 ft wide by 2 ft high. The water supply came from the stream that flowed from the escarpment northeast of the beach, in moveable pipes. A dozen or so barrowsful of cod could be washed at the same time with mops that had a seven- or eight-foot long handle. When the cod had been well stirred, the plug was pulled to let the water out. The cod was then water-hosed (piled up to drain) before being spread on the flakes.

The use of troughs to wash the cod seems to be a legacy of the first Europeans who processed their cod in America. The 18th-century illustrations provided by Du Monceau show partly submerged crates near the shore, in which men using large mops are stirring split cod (Figs. 63 and 64H).[13] In the 19th century, Fortin observed the same method used at Grande-Grave at the turn of the century, when the water was changed regularly.

Drying

Effect of the weather. As we saw earlier, in the section on salting, the Gaspé climate was conducive to the production of a lightly salted type of dried codfish which was internationally famous as "Gaspé cure." In days gone by, artificial methods for drying cod were unknown. The fish was dried outdoors by the sun. Producers liked this method because it was economical, but it forced them to depend on the weather. Rain, fog or excessive heat complicated the drying process by necessitating additional processing steps to preserve the characteristics of Gaspé cure that made this kind of codfish prized on the international markets. The cool, dry Gaspé climate and prevailing northwest breeze contributed to rapid drying, so that the finished product had a low moisture content (35 per cent). In a warmer climate, the fresh fish would have had to be salted more heavily to prevent bacterial growth, and this would have resulted in a different type of product. Gaspé has the ideal weather in spring and fall for drying cod, when it is not raining. The heat and humidity of July and August made the drying process more complicated, just when production was at its peak. As we shall see later, the Europeans had found a way of solving the problems involved in drying cod with only natural means available. The beach-master, who was in charge of production, had to make allowances for the weather in establishing high quality standards.

Beaches and beach establishments and flakes. Production of dried cod required a lot of space and fairly elaborate facilities. In the early 1900s, at Grande-Grave alone, the Hyman Company produced 5000 quintals of cod annually. An output like this gives some idea of the size of the facilities and the labour force required for the drying process. The name, Grande-Grave, is descriptive of the area's topography: the French word "grave" means, among other things, gravel beach, and that is just what the area was: a large gravel beach. And when the place was named, probably during the French regime, the cod was dried on the ground - that is, on the beach. Large stretches of gravel beach were needed to lay the fish out to dry in the sun, and this is why, in the Gaspé, some fishing establishments were located near large beaches; the name later came to be applied to such establishments. In the 20th century, the fish was spread out to dry on racks called flakes, but to complete the drying process it was spread out on the beach, just before it was shipped out. A map of the Janvrin establishment in 1809 shows many rows of flakes taking up most of the beach area (Fig. 7). It seems that both the beach and the flake method of drying codfish have been used concurrently and alternately, since the arrival of the first European fishermen. Wooden or stone flakes were used by fishermen who had no beach facilities available for drying their cod, just as wooden flakes were used in the 18th century for draining the cod before drying it on the beach (Fig. 64M).

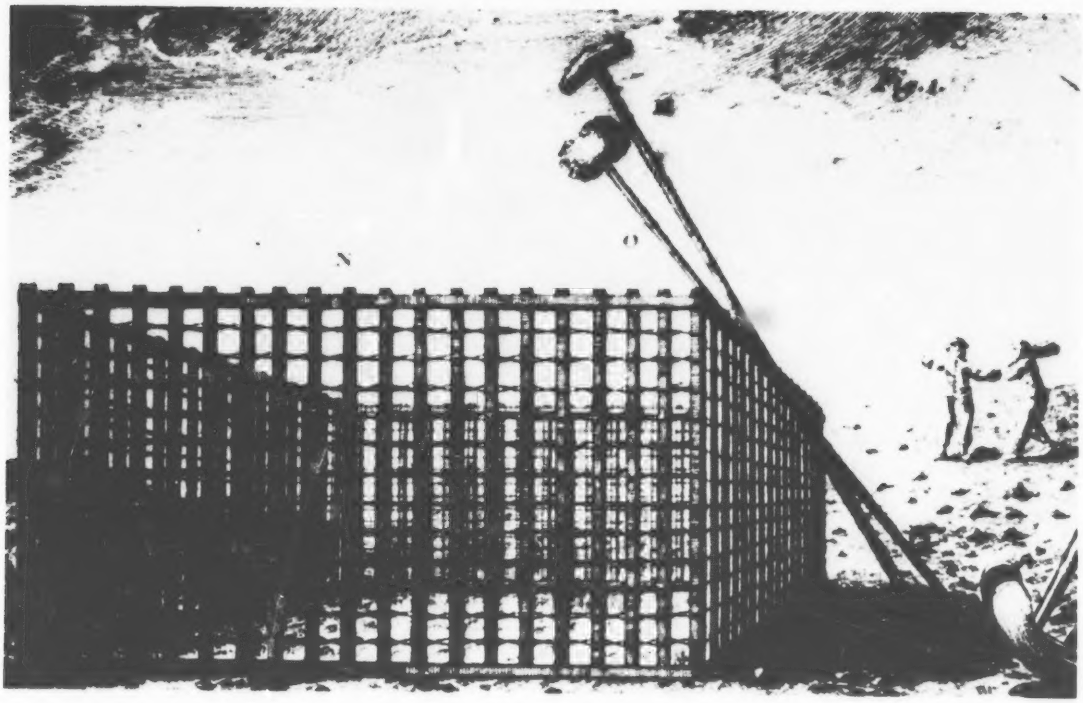


Figure 63. Eighteenth-century trough and mops.

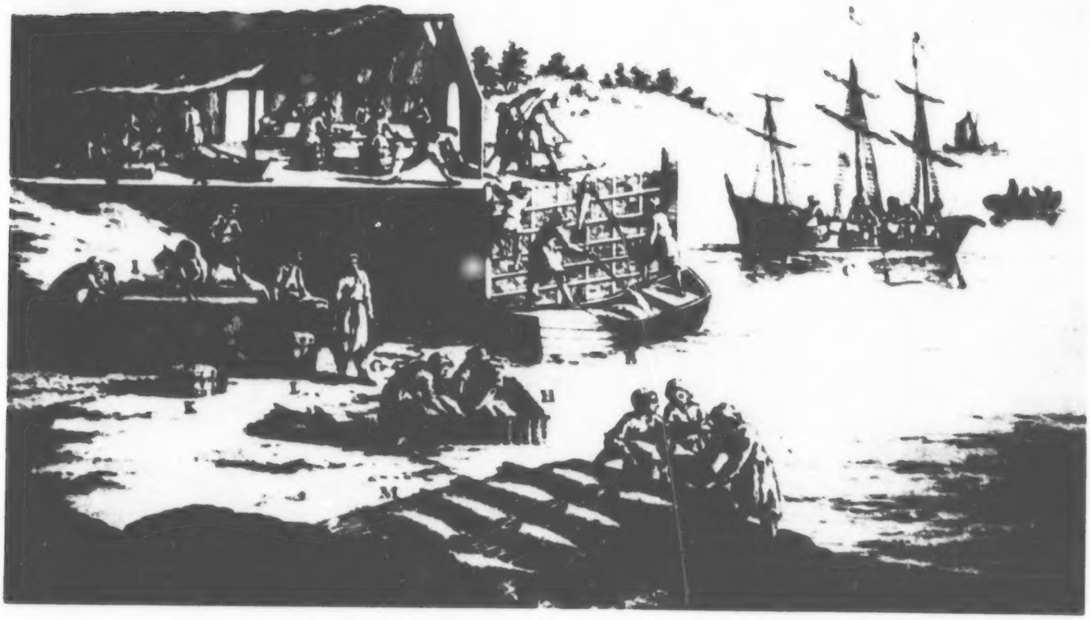


Figure 64. Processing cod in the 18th century.

At the beginning of this century, most of the beach at Grande-Grave belonged to the Fruing Company, which had taken over the Janvrin facilities in the mid-19th century. The Hyman Company, Fruing's next-door neighbour to the east, had only a small stretch of beach separated from the Fruing beach by a point of land. According to one of our oldest informants who worked for the company at the time, the beach-master had divided the Fruing beach into three parts, one for each of the three sails on a barge. The jib was the northwest corner of the beach, where the flakes were, the mizzen was the central portion, and mainsail was the southeast corner, next to the Hyman property.[14] By means of these names, the beach-master could locate the various lots of cod by how dry they were. The whole beach was criss-crossed with runs, which were wooden sidewalks of planks nine inches broad by three inches thick, laid to make it easier to carry the barrows from one part of the beach to the other and from the beach to the storehouses (see Fig. 65). The beach had to be kept impeccably clean to prevent the cod from coming into contact with any organic matter that would affect its quality. One man told us how he used to get rid of grass and weeds. The area around a blade of grass was cleared and the blade was crushed with a piece of bark, which was then buried in the gravel. In the 18th century one of the French fishermen's first tasks was to clean the beach.[15]

The flakes were platforms 3 ft high by 4 ft wide and 40 ft long. The frame was covered with rods to which branches of dry fir were attached. The advantage of using flakes was that air could flow more freely around the cod and dry it faster. The Shiphead fishermen, who did their own processing, built their flakes on the cliff because there was insufficient room on the beach. They also made platforms on which they piled up their cod. The platforms were necessary because there was no level ground in places.

Storing the dried cod. At Grande-Grave the companies had large storehouses for the dried cod. The cod was piled up there to sweat during drying. The independent fishermen also had to have storehouses, or sheds for their dried cod. Fishermen without such facilities delivered their dried cod to the company as it was ready.

The various tasks. Naturally, a large number of men was needed to handle the tens of thousands of cod processed in a season. In the companies the work was, as we have discussed, divided among fishermen, splitters and shore-workers (including porters). The porter's task was uncomplicated: he had to carry the cod to and from the beach and the flakes, spread it out and pile it up. The men were supervised by the beach-master, who used his flair - and his barometer - in directing the operations.

In the independent establishment, most of the drying was left to women, children and retired fishermen. The heads of families were busy fishing, splitting the cod and salting it, so they had little time to put the cod out on the flakes and see it through the drying process. Fishermen leaving Grande-Grave for Cape Gaspé remember the time when the women of the Shiphead would busy themselves around the flakes like bees around a hive.

In mid-August, just before delivering his fish to the company, the

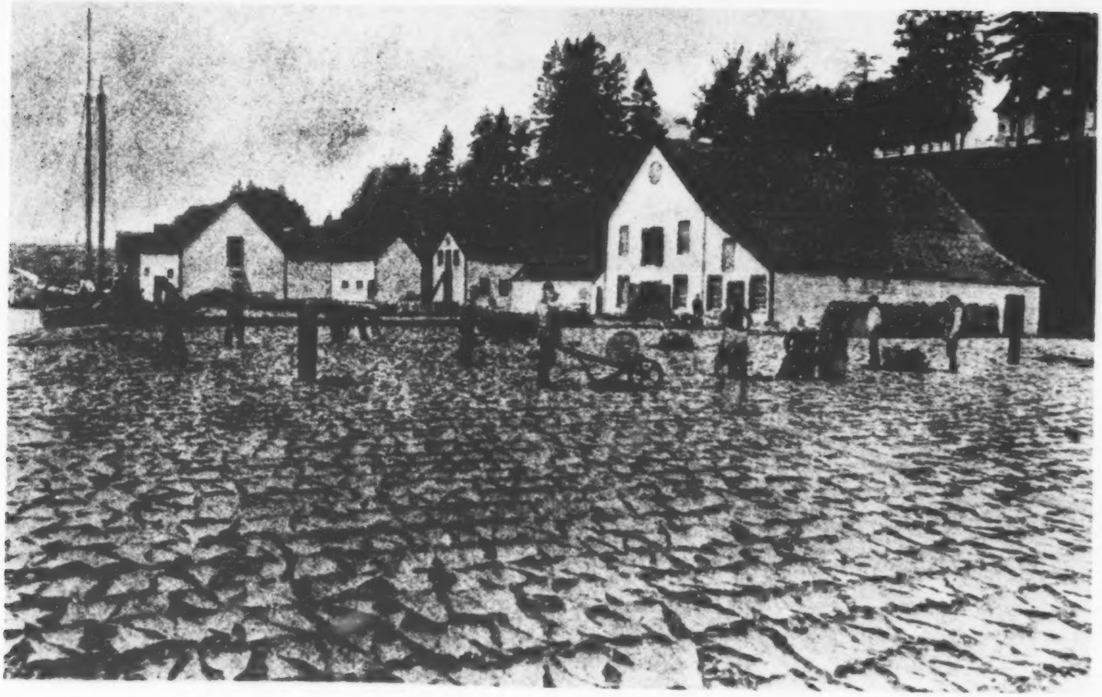


Figure 65. Cod spread out on a beach in the Gaspé in the early 1900s.

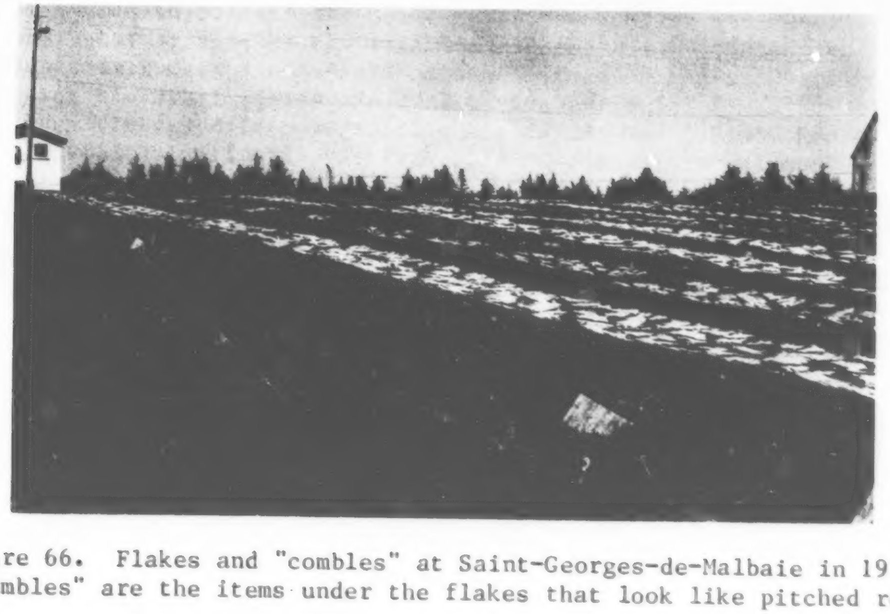


Figure 66. Flakes and "combles" at Saint-Georges-de-Malbaie in 1976 ("combles" are the items under the flakes that look like pitched roofs).

fisherman would stop fishing long enough to complete the drying. This period coincided with the harvest. Some fishermen who had lots under cultivation would stop fishing for two weeks. When the harvest was in and the fish had been delivered, the autumn fishing season would begin.

Drying process. After soaking in brine for three days, the cod was washed and press-piled to drain. The moisture content after salting was 74 per cent and once the drying process was completed, the moisture content had to have been reduced to 35 per cent. First the cod was laid in the sun, and then it was press-piled to make it sweat. The cycle was repeated until the cod was very hard and dry. This apparently simple procedure could be complicated by the weather, however.

The process of drying cod is part of an old tradition in the Gaspé, and when the fisherman or beach-master dried his fish, he proceeded in a predetermined order, at a rate that varied with the weather. When a fish was laid in the sun to dry, the fishermen used to say that "on lui donnait un soleil," or "il prenait un soleil." The Basques, who used to be known for the high-quality dried cod they produced in Canada, had established the duration of the drying process at ten exposures to the sun, plus one more before loading.[16] In the early 1900s, the method used was the direct descendant of the Basques'. In the first exposure, the green cod were spread out one by one on the flakes, flesh side up. In the evening, they were turned skin side up and piled eight to ten high, which the fishermen called making "bonnes-femmes," "balles," "p'tits bouchons" or "p'tits mitons." The next day, on the second exposure, the fish were laid out singly again, and in the evening they were piled in "balles" about 30 cod high. The piles were made bigger after every exposure.

As a result, as the fish dried, it was subjected to gradually increasing pressure to squeeze out the remaining moisture. The sometimes less than perfect weather exposed the fish to deterioration in one form or another, which the beach-master had to prevent or correct. Fly droppings were one problem, and some fishermen spread lime around the flakes to chase the flies away. In the evening, if it was going to rain, the men would cover the little piles of cod with two big codfish, or with a "comble" or "dallot." Alternatively, the little piles could be covered with pieces of bark, and the big ones were sometimes protected with a sail. The big piles of 30 quintals or more were placed in the shape of an inverted cone so that the cod on top could drain off into the ones on the bottom (Fig. 67). In the first tier, the fish was arranged flesh side up, and in the succeeding tiers it was put flesh side down (Fig. 1).

Whether the cod were dried on the flakes or on the beach, they had to be spread out so that they were not touching. If they were, they might become greasy. This could also happen if half-dry cod were left piled up too long in hot, humid weather. In bad or foggy weather, a grainy mould might form on the cod. The fishermen called these fish "breumeuse," meaning, literally, "foggy." One remedy was to separate the mouldy cod and salt them again. In the final analysis, the various problems and the necessity of handling the cod many times throughout the season made the work fairly demanding.

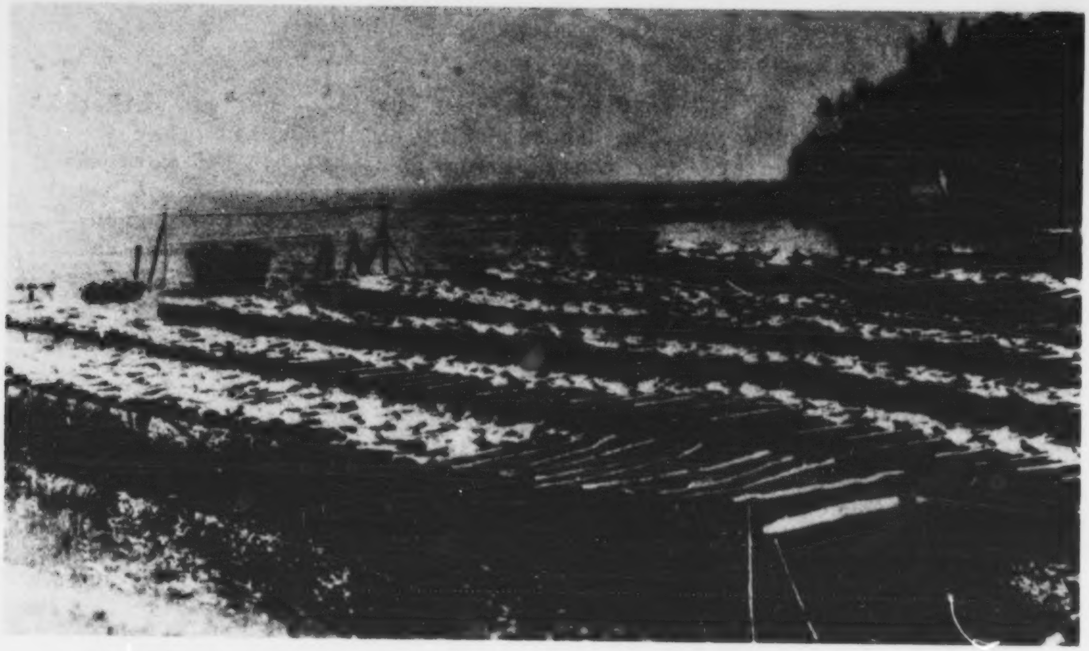


Figure 67. Flakes and piles of cod on a beach in the Gaspé in the early 20th century.

When the cod was quite dry, a light, white powder could be seen on it. It was said that the fish "faisait sa fleur" (was making flour). The fish was then put out on the beach one more time before it was shipped to market. The porters formed piles of dried cod which they carried on barrows to the storage shed (Fig. 28). Inside the shed, expert pilers worked stacking the cod in big piles 4 ft wide by 6 ft high by 12 ft long - like books on a shelf. When the cod was ready for shipping, it was put into barrels which could hold 448 lb. of dried cod (four quintals), or into tubs (Fig. 68) holding 112 lb.

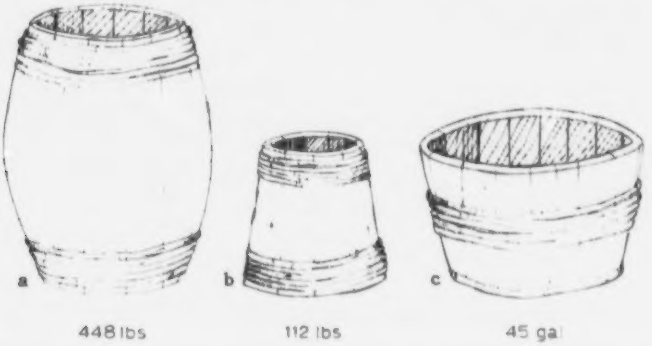


Figure 68. a, Barrel; b, small tub; c, large tub.

Cod Liver Oil

Cod liver oil was the only byproduct of the fish that was marketed in the early 20th century. The others - tongues, heads and other innards - were appreciated for their flavour and utility, but were never marketed. They were considered a delicacy by fishermen and Gaspé hotel guests, but remained a local dish. The fishermen salted the tongues, heads and entrails for their personal use and also used the heads as fertilizer.

Production. Cod livers were also considered a culinary treat, but their main importance was the oil they contained. Cod liver oil could bring a fisherman extra income for little effort, since it was rendered by merely putting the livers out in the sunshine, in barrels. The independent fisherman's output was not great, as it took 100 quintals of cod to make two or three 70-gal. casks of oil, and few fishermen produced 100 quintals of cod in a season. At the turn of the century the company paid the fishermen 25 cents a gallon for cod liver oil; a man could make $15 on two 30-gal. casks.

Utilization. The sun-extracted oil was sold by the company to Quebec City tanners, who used it for treating leather. After buying Fruing out, Hyman and Company produced cod liver oil that was extracted by steam in a kettle. This oil was of superior quality and was used for medicinal purposes. For this reason, the facilities used for the extraction process and the oil itself were inspected by the government. The kettle was set up in a shed on the beach. The medicinal oil was shipped to London, Ontario, Cloucester, Massachusetts, Montreal and Quebec City. The liver residues were used by the fishermen's wives for making soap, and by the fishermen, who mixed them with water and ochre, to make a coating for shingle roofs. Independent fishermen, and those hired by the Fruing Company, rendered their cod livers themselves, in barrels exposed to the sun. When the cod were split, the header would put the livers in a basket; later, they were thrown into the cask.[17]

Kettle oil. Hyman and Company produced cod liver oil in kettles, paying one or two men 20 cents an hour for this work. The men were also responsible for fetching cod livers from the fishermen of Grande-Grave and neighbouring areas. These employees sailed to each fishing cove every evening after the fishing day was over, collected the livers, weighed them on the spot and recorded the transaction in a ledger. Back at the company premises, the livers were washed and sorted before rendering. White, unblemished livers were used for producing medicinal oil, while blemished ones were turned into tannery oil.

Cask oil. In the traditional method, the livers were rendered in casks (Fig. 69), which could be 90-gal. molasses puncheons cut in half, pork barrels or other similar containers. The inside of the cask was divided in half by a curtain of dry fir branches laid lengthwise, to separate the livers from the filtered oil. Three holes were punched in the side into which the oil seeped, one about ten inches from the upper

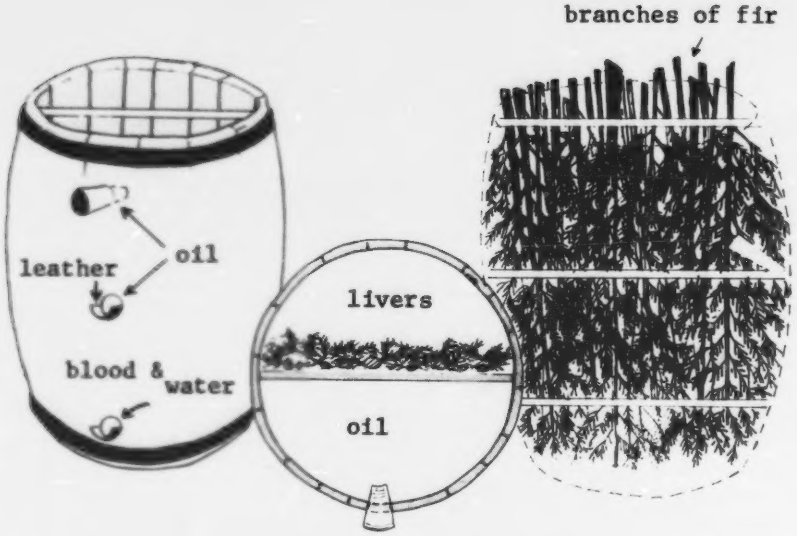


Figure 69. Blubber cask.

rim, one in the middle, and the third three or four inches from the bottom. The first two were for collecting the oil, and the third was for extracting the water and blood (which was denser than the oil). At each opening a piece of leather was attached as a spout. During the rendering process, the holes were plugged with wooden stoppers. The oil was collected every other day or so, depending on how much fish had been caught. It was then poured into another barrel, to be delivered to the company at the end of the season.

At the company, a special rod was inserted into the barrel which the fishermen had brought, to determine how much water there was in the oil and subtract it from the total gallonage. As stated earlier, the fishermen working for the company dissolved the cod livers themselves in the sun. The casks were set up on the stage-head, or on a platform near the beach. The rendered oil was then poured into similar casks indoors. An opening was punched at the bottom of the cask to drain off the rainwater that may have collected. Indoors, the casks were arranged in rows on a platform. A shore-worker periodically removed a piece of planking from the floor to drain the water.

The 18th and 19th centuries. The amount of oil extracted varied from season to season depending on what the cod fed on. If capelin and sand lance made up most of the fish's diet, the yield of oil could be excellent, as these are very oily fish. If, however, the cod had had to make do with crustaceans and mollusks, there might be only half as much oil. Referring to the production of oil from the Moisie River on the North Shore, Captain Fortin commented that the yield had diminished by half because the livers were so lean that year.

In the 18th century, cod liver oil had also been extracted by exposing the livers to the sun. The French fishermen threw the livers into large crates, which they called "cageots" or "foissiers." Around the inner walls of the crate they hung a trellis to which they attached sacking, which separated the oil from the livers. The crates could be eight or nine feet high; sometimes they had a ramp so the fishermen could walk up to them (Figs. 64I and 70C).

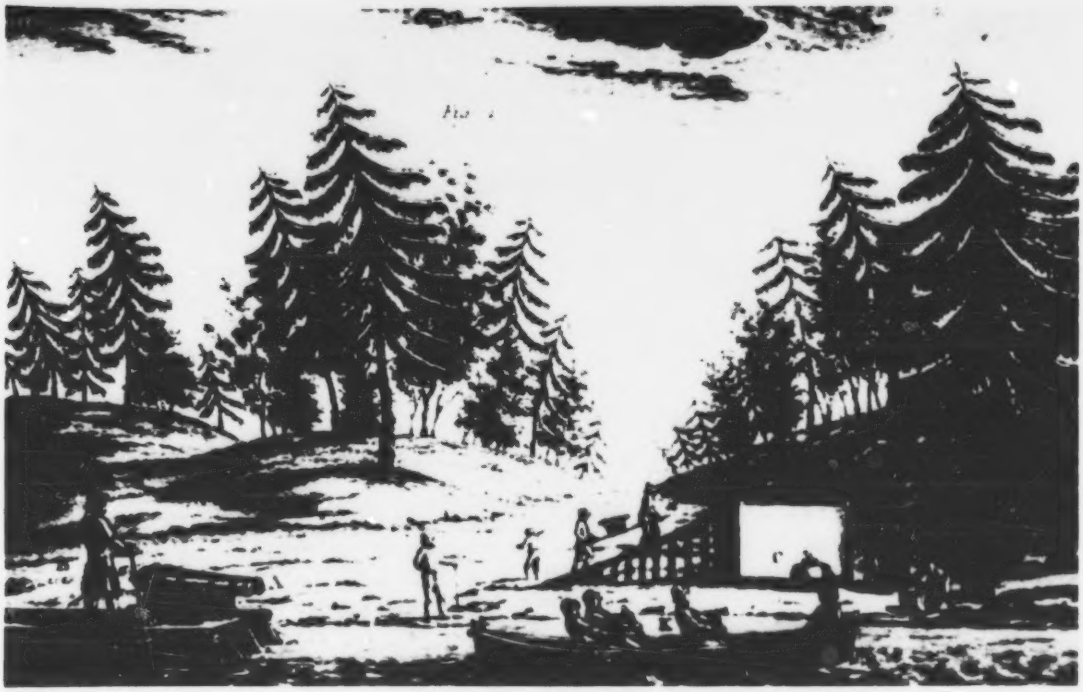


Figure 70. Type of crate used in the 18th century.

Grading and Shipping of Dried Codfish

Grading

August 15. The dried fish was usually delivered to the company on or near August 15, the end of the summer season. The companies, having agreed on a set price for a quintal of cod, began to receive the independents' fish. Only then could the draft fishermen assess their profits, because the drafts of salt cod were converted into quintals of dried cod. This is why they said that they fished "sans prix" (for free) all season. In the early 1900s, quality standards and grading methods were set by the company culler, who was generally the beach-master. Only later in the century did the government employ public servants for this job. After that, the fishermen could ship their own cod without dealing with the company, but this might be difficult for those who were in debt.

The grading was done on the beach where the culler, standing at a big table, inspected the cod brought in by the independent fishermen and separated high quality merchantable fish from inferior fish.

Our interviewees told us that during the period under study, there were two grades of cod: top grade, and cull, the latter being inferior fish. The top grade fetched $4 to $5 a quintal, the other $2 to $3. Merchantable fish had to be very hard and translucent, with a powdery white surface. To check the quality of the fish, the culler would press his thumb on the flesh and rub it with a brush, to bring the powder out. A fish could be graded "cull" because it was greasy, "foggy," burned, soft, improperly split or badly dried. Other fishes of the cod family, such as haddock, Greenland or rock cod and brill were considered inferior. By the 1920s there were four grades, namely Perfecto, Primerose, Eureka, and BB (Barbados). The fish was also graded by size as extra small, small, medium, large or extra large.

The fishermen considered some cullers stricter than others, saying that they graded too many cod as cull. There are many stories about the cullers' use of honest practices, depending on how much the fishermen owed the company. A fisherman who did not "owe" his cod to the company was in a better position, since he could take his cod elsewhere if he thought the culler's decision was unfair. The man who did "owe" his cod to the company had no choice but to accept the culler's verdict.

Mid-August was also harvest time. Some fishermen stopped fishing for a week or two, to finish their work in the fields and put their cod out in the sun once more. Others, who did not own any land, continued fishing and went to have their fish "weighed" when it was too windy to go out. Most of the fishermen delivered their own cod by cart or boat. Sometimes, the company culler would go to weigh and grade the fish caught by the dealers, especially at Indian Cove and the Shiphead.[1] After the fish was weighed, it was picked up in bulk and taken on company carts or coasting barges. At the company storehouses, it was weighed and packed in barrels or tubs for shipping.

Barrelling. The type of container used for packing cod was determined by market requirements and by government regulation.[2] The barrel containing 448 lb. of dry cod (Fig. 68) was, it seems, still something new in the early 1900s. Formerly, the fish had been shipped in bulk on ships, or put in tubs for the Brazil market (Fig. 68).[3]

The Fruing Company had a cooperage in one of the buildings on the beach where tubs and barrels were made. In addition, many barrels were made by the residents of Cap-aux-Os, Douglastown and Gaspé. The introduction of the barrel probably stimulated the growth of a new local industry - barrel-making - as the company cooperage could no longer handle the job alone (one barrel held 448 lbs. of dried fish, or four quintals).

The fish was barrelled after being weighed (Fig. 71). If it was produced directly for the company (draft fishing), it was barrelled as soon as it was dry. It was weighed after it had been salted and washed, and the dry weight was determined by a calculation that established the equivalence of green cod in dried cod. Fish brought in by the independents was weighed at the time of delivery. During barrelling the dry cod was put flat in the barrel, flesh side up. A man tamped down the cod at regular intervals to make sure it was well packed in. When 448 lb. of cod had been put in, the cod was about one foot above the top rim. Then the barrel press was used. This was a kind of jack to which two three-inch-thick planks were attached which fitted the barrel bottom (Fig. 72).

The cod was pressed level with the rim and left in the press for 15 or 20 minutes, after which a company employee sealed the bottom of the barrel. Cod packed in tubs was pressed in the same way.[4] For shippng to the United States, the cod was packed in boxes that could hold 100 lb. of dried cod. The boxes, delivered unassembled, were manufactured in the Quebec City region. They were stamped with the company seal and a description of the grade and size of the fish. For big cod, larger-diameter barrels were manufactured.

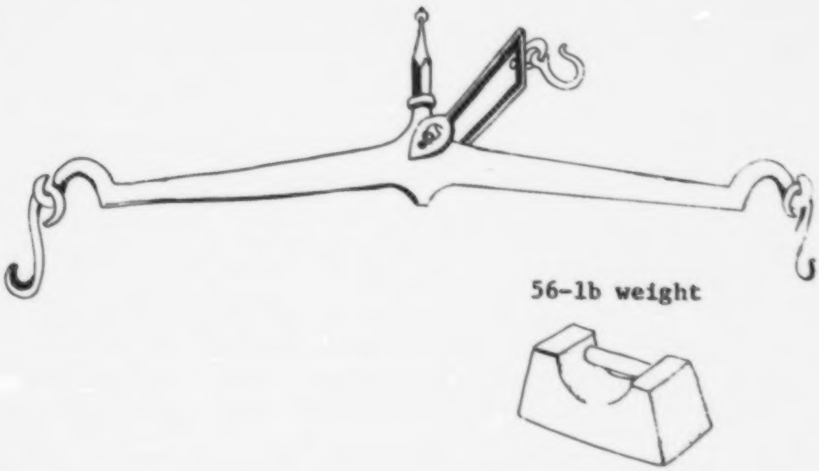


Figure 71. Weighscale.

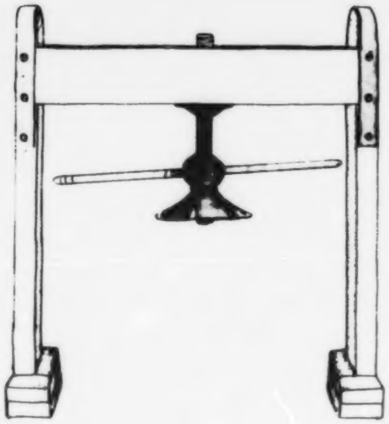


Figure 72. Barrel press.

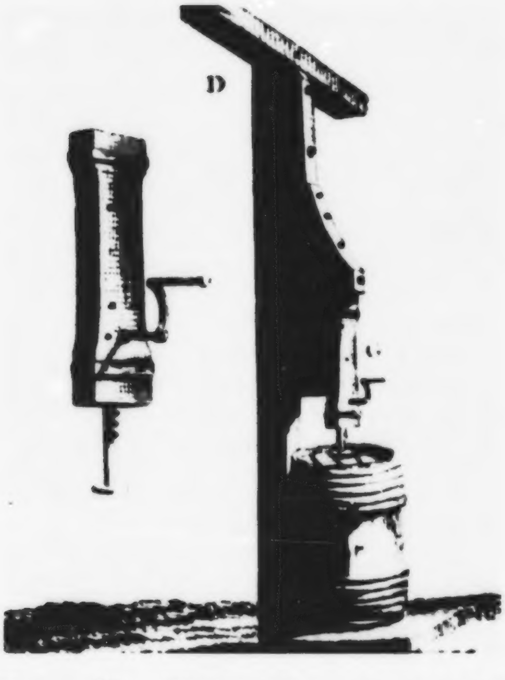


Figure 73. Eighteenth-century press.

Shipping

Lighterage and storage. Grande-Grave had no deep-water wharf where schooners could berth and take on a cargo of cod. The village's present harbour was built in 1950, and the wharf at Indian Cove was constructed shortly afterward. Formerly, there were only two short jetties where fishing barges or lighters could dock. One jetty was on the Fruing part of the beach (Fig. 10) and the other on the Hyman part. At St. George's Cove, the Gorton Pew company used a small floating wharf whose base followed the slope of the shore. The fish were therefore loaded into deckless barges that sailed between the wharf and the schooner, which was anchored some way out. In calm seas, the schooner was connected to the shore by a cable, which was used to pull the barge. In bad weather, no work was done; the schooner took shelter on Douglastown bank. The barges could hold about 20 barrels, which were hoisted on the schooner with chains and pulleys.

The boats that took delivery of cod at Grande-Grave were coasters with a capacity of about 100 barrels. They made the rounds of all the company establishments, then moved on to Gaspé harbour to unload their goods in the big company storehouses.[5] From the port of Gaspé the cod were loaded onto ships bound for Europe or South America. The Fortin reports reveal that in 1864 Fruing and Company had four storehouses on the south side of the Gaspé basin, in which 20,000 quintals of dried cod could be kept.[6] This company also had a wharf with berths for five ships.[7] In that period, Hyman and Sons had a storehouse that could contain 3000 quintals of dried salt cod, on the north shore of the Gaspé basin.[8]

The company fleets at Grande-Grave in the 19th century. In the 19th and until early in the 20th century, Fruing apparently had the largest establishment at Grande-Grave. It had its own fleet of ships, and chartered some others. In 1862 Fruing owned four ships: a 180-ton bark with a crew of ten, a 98-ton brigantine with a six-man crew, and a 59-ton and a 25-ton schooner, with four-man and three-man crews, respectively. Hyman and Sons owned a 35-ton schooner, the *Agnes*, with a three-man crew. A Grande-Grave merchant named Dumaresq had a 16-ton schooner with a three-man crew, and a St. George's Cove merchant named Perry had an 18-ton schooner with a three-man crew.[9] In 1864 Fruing owned eight ships among which were one bark, two brigantines and four schooners, and chartered five more schooners.[10] We know that Robin and Company also had its own fleet of ships and its own shipyard at Paspébiac.

In the second half of the 19th century, Fortin commented that shipping of the products of the Gulf of St. Lawrence fisheries was almost entirely controlled by Jersey outfitters.[11] An examination of the itineraries and cargoes of the Fruing fleet for 1864 shows that shipping was scheduled so that vessels could always come and go with full loads. Cargoless trips were avoided as much as possible. In addition to dried codfish and cod byproducts, which were sent to Jersey in particular, Fortin reports that the bark *Alice Jane* carried cargoes of wood, copper, tar and sealskins in her hold.[12] In her last autumn crossing to Jersey, the *Alice Jane* took home Jersey Islanders who had spent the fishing season at one of the Fruing establishments in the Gaspé.[13] Apparently the Jersey families, who made up a large proportion of the population of Grande-Grave at the turn of the century, were the direct descendants of some of these seasonal employees who had come out from Jersey in the 19th century and gradually settled along the Gaspé coast.

The Fruing fleet's itineraries for 1864 reveal that there were two peak shipping periods, one at the beginning of the season and the other at the end. Between May 17 and early July, three ships came to deliver goods, fishing gear and salt to Gaspé. They left about a fortnight later with the first cargo of dried cod and returned again in fall with salt from Europe or other goods, such as Barbados molasses. Then they would sail again, mainly for Europe, with the season's last cargoes of cod. In late summer and early autumn, several more ships joined these first three. All but one of them had a cargo of salt from Cadiz on board. Five of the nine ships were chartered by the Fruing Company. These extra ships loaded up with dried cod and most returned to Italy. Most of the salt used for the next year's processing was thus delivered at the end of the season. In this way the companies were able to ship their cod to foreign markets more economically, and still have an adequate supply of salt on hand.

In the age of sail, an Atlantic crossing took about 40 days, sometimes longer. Navigating near the Gaspé coast was somewhat hazardous and there were many shipwrecks. In 1864 two ships from the Fruing fleet were shipwrecked, one at Rivière-au-Renard and one at Percé. Two of a total fleet of 13 ships is a significant loss.

Markets

Almost all the dried cod produced in the Gaspé went to foreign markets. As we have seen, the Jersey companies had set up establishments in the Gaspé precisely to meet the heavy demand, from the Mediterranean countries in particular. Hence, most of the merchantable dried cod went to these countries.

The Italian market was fairly large. There was so much trade between Italy and the Gaspé that in 1862 an Italian consulate was opened at Gaspé. The first consul was Horatio Le Bouthillier.[14]

Cod for the Spanish market was sent to Cadiz in return for salt. Another large proportion of the total cod production went to Oporto in Portugal and to Rio de Janiero and Bahia in Brazil, which was a Portuguese colony until 1889.

In the mid-19th century, John Le Bouthillier, an exporter and later Member for Gaspé, was the first to export Gaspé cod to the West Indies - Puerto Rico, Jamaica, Barbados, Trinidad and Bermuda.[15] Until then, this market had been reserved for merchants from Nova Scotia, Newfoundland and the United States.[16] Inferior fish, used for feeding slaves, was shipped to these markets. Around 1920, the West Indies were still a good market for this type of cod, as the trade mark BB (for Barbados) implies.[17]

Autumn cod that had not completely dried was sent salted to the home market (Quebec City and Montreal) or to the United States. Most Grande-Grave fishermen kept a few barrels of salt cod for themselves, and some of the cod was sold to the nearby lumber camps and sawmills. Fishermen who had been unable to sell their surplus cod that autumn kept it in brine over the winter and dried it in the spring.

Conclusion

It was said in in the introduction that the type of fishing practised at Grande-Grave in the early 1900s was a legacy of the 19th century, unlike the methods used in other Canadian Atlantic regions where the process of change and renewal had begun in earnest. The description provided by contemporary fishermen proves this point. Fishing and processing methods had hardly changed since the 18th century. The only noteworthy new feature was the introduction of the outboard motor, which eventually brought about changes in fishing practice.

The social and economic structures of the Gaspé fishing communities are all based on a production system introduced by the Jersey companies, which controlled the fishery in the 19th century. The most obvious changes have come in these structures. Some categories of fishermen (the halfliners and dealers) disappeared as others (the independents) come to the fore. Those draft fishermen who did not own processing facilities could now profit from a new economic situation (changes in production, competition) and receive cash for their fish. These social and economic changes may be partly attributable to the gradual decline in the number of French-Canadian seasonal fishermen, more and more of whom settled on the north shore of the Gaspé since the last quarter of the 19th century, while others drifted toward the vacant lands on the North Shore of the St. Lawrence. The same can be said of the shore-workers, who were also part of this migration. The organizational structures that had evolved this from migration disappeared with it. However, we do not believe that the changes that could be seen taking shape at the turn of the century can be attributed solely to migration. Internal change, in the companies, as well as such external conditions as markets and movement of goods, may also help explain them.

To understand the social, economic and technical aspects of fishing at Grande-Grave, we must therefore understand the Jersey organizational system from which they evolved in the 19th century. Research aimed at finding out and demonstrating how this sytem worked can help explain the social and economic relationships it engendered. Such research can also help explain the early failures of the co-operative movement in the fish processing industry a little later in the 20th century.

In summary, the cultural identity of Grande-Grave at the turn of the century, with all its diversity (ethnic groups, social classes, techniques, housing, kinship, religion, oral tradition...), was shaped by the social and economic conditions in which the fishing industry developed. It seems evident that at Grande-Grave understanding of the culture of the Gaspé depends on knowledge of these conditions.

In a future monograph we will see how the social and economic conditions of some individuals and groups of fishermen developed by examining the economic ties between the fishermen and the Hyman Company, and among the fishermen. We will use the case study method to explore the history of Grande-Grave and of the Hyman Company in the second half of the 19th century.

Endnotes

Historical Introduction: Cod Fishing in the Gaspé

1 Nicolas Denys, *Description géographique et historique des costes de l'Amérique Septentrionale* (Paris: Claude Barbin, 1672), Vol. 2, p. 252.
2 Canada. Public Archives (henceforth PAC), RG1, L3L, Vol. 133, Fol. 65500-65502.
3 Harold A. Innis, *The Cod Fisheries: the History of an International Economy* (Toronto: University of Toronto Press, 1954), pp. 192-93.
4 Ibid., pp. 277 and 494.
5 Ibid., p. 191.
6 Ibid., p. 494.
7 Ibid., p. 187.
8 Ibid., p. 188.
9 Ibid., p. 503.
10 The census of Canada for 1765 mentions 209 residents for Chaleur Bay and 109 for Gaspé. *Census of Canada, 1665-1871*, Statistics of Canada, Vol. 4 (Ottawa: Taylor, 1876), p. 65.
11 Innis, op. cit., p. 191.
12 Ibid., p. 192.
13 Ibid.
14 Ibid. He must mean fresh cod, because the number of people mentioned here could not process that much dried cod. The equivalent in dried cod is about 20 per cent of the total amount of fresh fish, and in this case equals 2400 and 2800 quintals of dried cod. See the chapter on salting for how to calculate the equivalence.
15 Ibid.
16 PAC, RG1, L3L, Vol. 111, Fol. 54459.
17 Innes, op. cit., p. 279.
18 Ibid.
19 Ibid., p. 282.
20 Ibid., p. 357.
21 Ibid., p. 403.
22 Ibid., p. 426.
23 Ibid.
24 Ibid., p. 188. Joshua Mauger, a Jerseyman, had considerable influence on the development of rum and sugar production in Nova Scotia in the second half of the 18th century.
25 Ibid., p. 427.
26 Ibid.
27 Ibid.

The Cod

1 Today, biologists believe that cod has been overfished.
2 Innis, op. cit., p. 3.

3 Pierre Brunel summarized knowledge on vertical movements of cod in *Travaux sur les pêcheries du Québec*, No. 36 (Sept. 1973).

4 See the section on the bob in the chapter on fishing techniques.

5 Innis, loc. cit.

6 Brunel, "Les migrations horizontales des poissons, en particulier la morue: résumé ctitique des connaissances et d'opinions récentes," *Travaux sur les pêcheries du Québec*, No. 33 (Sept. 1973), p. 11. Id, "The Gaspé Cod Ecosystem in the Gulf of St. Lawrence II. Weekly Fluctuations of Commercial Trawl Catches of Cod with Depth and Temperature in 1960-62," *Travaux sur les pêcheries du Quebec*, No. 40 (1971), p. 823, Fig. 5.

7 The purpose of the lateral line could be explained by the following. Cod were often hooked by the belly or another part of the body (not the mouth) in jigging (Figs. 52 and 53). The cod locates the noise produced by the up-and-down motion of the gear, swims closer out of curiosity, and is hooked on the jigger. (Personal communication from Maxime St.-Amour, head naturalist at Forillon Park, summer 1977.)

8 Vivien Brown, quoted in "The Life of the Atlantic Cod," *Cape Breton's Magazine*, No. 13 (June 1976), p. 14.

9 Claude Mélançon, *Les poissons de nos eaux* (Montreal: Ed. du Jour, 1973), p. 254.

10 A.H. Leim and W.B. Scott, "Fishes of the Atlantic Coast of Canada," *Bulletin* No. 155 (Ottawa: Fisheries Research Board of Canada, 1966), p. 197.

11 Michael Graham, quoted in "The Life of the Atlantic Cod," *Cape Breton's Magazine*, No. 13 (June 1976), p. 16.

12 Brunel, op. cit., No. 33, p. 12.

13 Innis, loc. cit.

14 Leim and Scott, loc. cit.

15 *Cape Breton's Magazine*, No. 13 (June 1976), p. 13.

16 Brunel, op. cit., No. 33, p. 6.

17 Michael Graham, loc. cit.

18 Wilfred Templeman, "Division of Cod Stocks in the Northeast Atlantic," *ICNAF Red Book*, Part III (Dec. 1962), p. 85.

19 Ibid., p. 99.

20 Fursy-Verdoy, "La morue: sa valeur diététique," in Jean Malaurie, *Géo-Economie de la morue*...(Paris: Mouton, 1969), p. 52.

21 "500 grammes de chair de morue (filets de morue), *en tant que sources de protéines*, remplacent 900 grammes de viande comestible avant cuisson, soit 1085 grammes après cuisson ou trois litres 820 de lait entier, ou 20 oeufs entiers." Ibid., p. 73.

22 Charles de la Morandière, *Histoire de la pêche française de la morue dans l'Amérique septentrionale*...(Paris, Maisonneuve and Larose, 1962-66), Vol. 1, p. 219.

23 Fursy-Verdoy, op. cit., p. 57.

24 Ibid., p. 54.

25 Ibid., p. 71.

26 Ibid.

A Jersey Fishing Establishment: Grande-Grave

1 In this monograph the name Grande-Grave is given to the south shore of Forillon bordering Gaspé Bay, from Petit-Gaspé to Cape Gaspé.

2 E.T.D. Chambers, The Fisheries of the Province of Quebec (Quebec City: Department of Colonization, Mines and Fisheries, 1912), p. 119. Quoted by Francine Lelièvre, Histoire Humaine du Parc National Forillon (Gaspé, 1973), p. 39.

3 PAC, RG1, L3L, Vol. 122, Fol. 60300.

4 PAC, RG1, L3L, Vol. 111, Fol. 54457 and 54461.

5 Aldo Brochet, "La pêche dans la golfe au XIX^e siècle," Revue d'histoire et de traditions populaires de la Gaspésie, Vol. 15, No. 1 (Jan.-March 1977), p. 25.

6 Quebec Gazette, February 17, 1820, p. 4.

7 Quebec. Department of Lands and Forests, Archives des arpentages, C-8-1.

8 Brochet, op. cit., p. 26.

9 David Lee, Address to symposium on the residents of the Gulf of St. Lawrence region, McGill University, March 1977.

10 Brochet, op. cit., p. 25.

11 Canada (Province). Department of Crown Lands, Rapport annuel de Pierre Fortin...1862 (henceforth Rapport Fortin), (Quebec City: Hunter, Rose and Lemieux, 1863), p. 107.

12 Ibid., 1862, pp. 82-85.

13 Ibid., 1859, pp. 66-67.

14 A cookroom could hold two crews, i.e. four men; seven cookrooms therefore could hold 14 crews. It was said that Fruing and Co. leased 14 barges at the turn of the century; this is generally the number mentioned elsewhere.

Fishing at Grande-Grave in the Early 1900s

1 "Quand on mentionne, pour un endroit, deux saisons de frai, on signifie par là que certaines populations se reproduisent au printemps, d'autres en automne, et non qu'un même indivu peut frayer deux fois par année." Jean-Marie Roy, Le hareng (Quebec City: Department of Industry and Commerce, 1964).

2 H.W. Bayfield et al., Sailing Directions for the Island of Newfoundland, the Coast of Labrador, the Gulf and River St. Lawrence, and the coasts of Nova Scotia & New Brunswick to Passamaquoddy Bay (London [England]: James Imroy, 1851), p. 107.

3 Brunel, op. cit., No. 33, p. 12.

4 No French name has been found for this fishing ground, and few francophone fishermen said that they used the American Bank, or "banc des Américains" as they call it.

5 Only the main characteristics of the Gaspé boat will be described here. A later report will be devoted to the construction of this type of fishing vessel.

6 Howard I. Chapelle, "Some American Fishing Launches," Fishing Boats of the World, I (London [England]: Fishing News [books], 1955), p. 2.

7 Rapport Fortin...1862, p. 65.

8 Chapelle, loc. cit.

9 Rapport Fortin...1859, loc. cit.

10 Jean Fréchet, "La Gaspésienne," Actualités marines, Vol. 2, No. 2 (Apr.-June 1958), p. 7.

11 Gaspé Bay fishermen now use mostly bottom gillnets for cod fishing. Two or more nets joined end to end make a set.

12 Bayfield et al., op. cit., p. 109.
13 Ibid.

Organization of the Fishing Industry

1 Unless otherwise specified, we use the word "splitters" throughout to designate (1) the worker who rips open the cod's belly (the throater), (2) the one who cuts its head off (the header), and (3) the one who actually splits the cod (the splitter).
2 Rapport Fortin...1857, p. 19.

The Fishermen

1 Innis, op. cit., p. 402.
2 In a future monograph, a case study of the Hyman Company account books should reveal the methods of pay.
3 The type of change that came about and how it occurred are still under study, and will be examined in more detail in a subsequent report.
4 Before the cod was shipped to foreign markets, the shore-workers laid the cod out in the sun once more.
5 Louis Bérubé, "Une victime de l'âge de fer, le premier mouvement co-opératif chez les pêcheurs de la Gaspésie" (Master's thesis, Laval University, Quebec, 1949), p. 5.
6 Noted by André Lepage during research on Robin and Company (thesis in preparation, Department of Anthropology, Laval University).
7 "Les maîtres des navires sont en même temps pêcheurs et capitaines au long cours. Pendant l'été, lorsque leurs bâtiments sont à attendre des chargements, ils commandent à terre des escouades d'hommes employés à préparer le poisson." Rapport Fortin...1856, p. 6.
8 Ibid., 1857, p. 6.

Fishing Techniques

1 See also Marcel Moussette, Répertoire des méthodes de pêche utilisées sur le fleuve et le golfe Saint-Laurent, Manuscript Report No. 83 (Parks Canada: Ottawa, 1968), pp. 139-43.
2 Fishermen could also buy round cork floats that were set out every two or three feet along the balk because they floated better. However, spaçing the floats wider apart closed the mesh and caused the net to drift.
3 The fishermen used vitriol to blacken the net and make it harder for the herring to see; they believed that the bleaching action of salt water on the net made it visible to the fish.
4 The same procedure was followed in the 18th century. Duhamel Du Monceau, Traité général des Pesches...(Paris: Saillant, Nyon and Desaint, 1769), Pt. 1, Sect. 2, Fol. 22 and Pl. VI.
5 The "chattes" were made by the fishermen or by the company blacksmith.
6 These fish were also taken by seining. See the section on seine fishing.
7 Du Monceau, op. cit., Pt. 2, Sect. 1, p. 96.
8 Rapport Fortin...1859, p. 72.
9 Fishermen who had no cuddy in their barge would sleep with a sail wrapped round their body.

10 To adjust to the herring's vertical movements, the fishermen also set the nets to catch this species closer to the bottom. See Moussette's description of Grande-Rivière, op. cit., p. 139 and pp. 308-09.
11 Leim and Scott, op. cit., p. 271.
12 The whale boat was rowed, but it could have sails. Toward the end of World War I, the outboard motor was introduced to Gaspé Bay, and some fishermen replaced the whale boat with a large flat with an outboard motor.
13 Rapport Fortin...1861, p. 26.
14 Ibid., 1866, pp. 68-75.
15 Fishermen also used to paint the jigger red so that the squid could see it more clearly. Rapport Fortin...1862, p. 122, and Alexandre Marcotte, "Utilisation des lignes pour la pêche de la morue et du flétan," Cahier d'information, No. 35, Section III (Grande-Rivière: Marine Biology Station, 1966).
16 See also Moussette, op. cit., pp. 302-03.
17 The spikes were headless copper needles, manufactured elsewhere.
18 Du Monceau, op. cit., Pt. 1, Sect. 1, Fol. 32.
19 Moussette quotes other authors who mentioned the use of the jigger, op. cit., pp. 104-05.
20 Nicolas Denys observed the same method in 1677. Quoted by Moussette, op. cit., p. 104.
21 A fishing season could be delayed by several weeks while the fishermen waited for the herring to come in the early summer.
22 Today, the mackerel can be fished all summer at Grande-Grave; this is a new situation for the fishermen.
23 This practice does not seem to have been generalized, according to our informants, who always repeated the same names of people who fished in this way.
24 Du Monceau, op. cit., Pt. 1, Sect. 1, p. 95.
25 Some fishermen from the Grande-Grave area had already tried seining for mackerel at the beginning of the century, but, according to our respondents, they had little luck.
26 With regard to the supposed conservatism of the Jersey companies in the area of technology, we would have to take a closer look at this aspect to determine the extent to which their organizational structure allowed for technical innovation.
27 The first outboard motors did not appear at Grande-Grave until World War I, and their use was not generalized at that time.
28 See Glossary.
29 Rapport Fortin...1859, pp. 65-66.
30 See note 7, in the chapter on cod.
31 Mémoire de M. De Brouage, commandant pour le roi à la côte du Labrador... (1718). Quoted by Moussette, op. cit., p. 102.
32 Rapport Fortin...1864, pp. 37-38.

Processing Cod

1 This refers to the work of the splitter, preceded by that of the throater and the header.
2 The header can also use a heavy knife to cut off the fish's head.
3 It must be remembered that at that time, fishing barges were not motorized, and the men always rowed or sailed to the fishing ground. If there was no wind on the way back, the return trip took many long hours of rowing.

4 S.A. Beatty and H. Fougère, "The Processing of Dried Salted Fish," Bulletin No. 112 (Ottawa: Fisheries Research Board of Canada, 1958), p. 19.
5 Ibid.
6 Ibid.
7 The salt saturation rate is 20 per cent. Ibid.
8 Ibid., p. 21.
9 The salter spreads the salt with a wooden shovel. Iron rusts on contact with salt, and rust yellows salt. Therefore, the salt must not be allowed to come in contact with any nails during storage.
10 Beatty and Fougère, op. cit., p. 15.
11 Du Monceau, op. cit., Pt. 2, Sect. 1, pp. 99-100.
12 Rapport Fortin...1859, pp. 67-68.
13 Du Monceau, op. cit., Pt. 2, Sect. 1, p. 94.
14 Du Monceau, loc. cit.
15 Ibid., pp. 100-101.
16 Rapport Fortin...1862, p. 53.

Grading and Shipping of Dried Codfish
1 As we have seen, these men could act as middlemen between other fishermen and the company.
2 Quebec (Province). Department of Colonization, Hunting and Fisheries, Instructions Regarding the Curing and Packing of Green Salted Codfish (Quebec City: Maritime Fisheries Directorate, undated), 2 p.
3 Rapport Fortin...1857, p. 26. Rapport Fortin...1862, p. 65. In the 19th century, the tub contained one Portuguese quintal, or 128 lb. of dried cod. According to our informants, in the early 20th century the tub contained 112 lb. of dried cod, or one normal quintal.
4 Ibid., 1857, p. 26.
5 Ibid., 1864, pp. 39-40.
6 Ibid.
7 Ibid., p. 40.
8 Ibid., pp. 39-40.
9 Ibid., 1862, pp. 82-85.
10 Ibid., 1864, pp. 58-59.
11 Ibid., 1857, p. 62.
12 Ibid., 1864, p. 58.
13 Ibid., 1863, pp. 47-48.
14 Ibid., p. 39.
15 Ibid., 1855, p. 5.
16 Ibid., 1862, p. 55.
17 Ibid., 1861, p. 25.

Illustration Sources

1 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. XVIII.

2 Thomas Pye, Canadian Scenery: District of Gaspé (Montreal: Lovell, 1866), engravings, just before p. 39.

3 Ibid., facing p. 16.

4 P. Hansen, "Cod: Its Biology and Habitat," in Malaurie, op. cit., p. 307, Fig. 2.

5 Leim and Scott, op. cit., p. 195.

6 PAC, RG1, L3L, Vol. 122, Fol. 60300.

7 PAC, RG1, L3L, Vol. 111, Fol. 54457.

8 Quebec. Department of Lands and Forests, Archives des arpentages, C-8-1.

9 J. Camille Pouliot, La grande aventure de Jacques Cartier (Quebec City: n.p., 1934), 2nd page following p. 216.

10 Postcard entitled "Grande-Grave Gaspé Co," Parks Canada, Historical Research, Quebec City, neg. 76-38-17 (35).

11 Photograph of Grande-Grave in 1905 reproduced by Maxime St-Amour with the permission of Mr and Mrs Kingsley Suddard of Gaspé, Parks Canada, Historical Research, Quebec City, neg. 76-8-12 (35).

12 Photograph of the Fruing agent's house at Grande-Grave ca. 1900. Reproduced with the permission of Mrs. T.A. Smith of Gaspé. Parks Canada, Historical Research, Quebec City, neg. 76-36-26 (35).

13 Photograph: Dalton Muir, Parks Canada, Ottawa, 1969.

14, 15 Drawings: Francis Moyle, from nautical chart Cap des Rosiers to Chandler (Ottawa: Canadian Hydrographic Service, 1973), chart D9-4485. Parks Canada, Historical Research, Quebec City.

16 Chapelle, op. cit., p. 2.

17-20 Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec City.

21 Parks Canada. Historical Conservation. Artifacts of Forillon Park, photo 6885.

22, 23 Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec City.

24 John M. Clarke, L'île Percée, the Finial of the St. Lawrence or Gaspé Flaneries... (New Haven: Yale University Press, 1923), photograph facing p. 101.

25 Photograph of Indian Cove in 1933 reproduced with the permission of Mrs. Irwin Simon of Rosebridge (Gaspé). Parks Canada, Historical Research, Quebec City, neg. 76-8-5 (35).

26 Photograph by the author, Parks Canada, Historical Research, Quebec City.

27 Québec, Inventaire des biens culturels, fonds Gérard Morissette, Grande-Grève, A-1 (photo, O P), 1948.

28 John M. Clarke, The Heart of Gaspé, Sketches in the Gulf of St. Lawrence (New York, MacMillan, 1913), photograph facing p. 184.

29 Leim and Scott, op. cit., p. 95.

30-32 Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec City.

33 Pye, op. cit., detail of engraving facing p. 16.

34 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.

35 Leim and Scott, op. cit., p. 272.
36 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.
37 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. XIII, Fig. 1.
38 Marcotte, op. cit., No. 35, Pl. XI.
39- Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
41 City.
42 Leim and Scott, op. cit., p. 118.
43 Ibid., p. 285.
44 Ibid., p. 120.
45 Marcotte, op. cit., Pl. LX.
46, Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
47 City.
48 Marcotte, op. cit., Pl. LIX.
49 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.
50 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. VII, Fig. 1.
51, Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
52 City.
53 Marcotte, op. cit., Pl. VI.
54 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.
55 Charles-Eugène Roy and Lucien Brault, Gaspé depuis Cartier (Quebec City, Moulin des lettres, 1934), p. 105.
56, Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
57 City.
58 A.G. Huntsman, "The Processing of Dried Fish," Bulletin No. 9 (Ottawa: Biological Board of Canada, 1927), p. 6.
59 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.
60 Photograph by the author, Parks Canada, Historical Research, Quebec City, neg. 76-22-8 (35).
61 Drawing: Francis Moyle, Parks Canada, Historical Research, Quebec City.
62 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. XV, Fig. 3.
63 Ibid., Fig. 1.
64 Ibid., Pt. 2, Sect. 1, Pl. XVII, Fig. 2.
65 PAC, national photographic collection, C19207.
66 Photograph by the author, Parks Canada, Historical Research, Quebec City, neg. 76-22-17 (35).
67 PAC, national photographic collection, PA 44049.
68, Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
69 City.
70 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. XVI, Fig. 1.
71, Drawings: Francis Moyle, Parks Canada, Historical Research, Quebec
72 City.
73 Du Monceau, op. cit., Pt. 2, Sect. 1, Pl. XII, Fig. 2 (detail).

Glossary

[TRANSLATOR'S NOTE: Words preceded by an asterisk have no English equivalent. Words followed by a question mark are proposed English equivalents of regionalisms.]

AFLOAT. Close to the surface (said of cod)

BAIT. "Something used in luring [fish]." (*Webster's New Collegiate Dictionary*, henceforth NCD)

BARGE. Boat used for fishing; designates the crew as well as the craft (Figs. 16, 17, 22)

BEACH AND BEACH ESTABLISHMENT. "Grave" is an old French word meaning gravel or pebble beach, on which fish were laid to dry in the days of the French regime. The meaning has been extended to include an entire fishing establishment, located on or near such a beach.

BOB, BOBBER. A type of hand line used in fishing for cod near the surface (Fig. 51)

BOLT-ROPE. "A strong rope stitched to the edges of a sail to strengthen it" (NCD). Also, the upper and lower ropes to which the webbing is attached.

BOTTOM CAPACITY? (soutenure). The portion of a barge below the water line. A barge that has a wide, almost flat bottom is said to have a good bottom capacity.

BRUSH? (brousse). Fir branches

COASTING BARGE. A large, flat-bottomed boat used in transporting goods, specifically fish, from the beach to the schooner

COOKROOM. Building in which fishermen and shore-workers live during the fishing season, located on a company's or an independent fisherman's beach establishment

***COUCHAGE.** Action of laying out split fish for kench-salting or pickle-salting

***COUCHEUR.** Person who lays out split fish for salting

CUDDY. The cabin of a barge

CULL. To choose dried cod of inferior quality, and dried fish of other species, such as Greenland cod, haddock, brill

CULLER. Person who sorts or grades dried cod

***DEGRAT.** "Ce sont des chaloupes ou des goëlettes qu'on dépêche pour aller chercher des endroits où il se trouve du poisson, lorsqui'il ne s'en grouve point au poste qu'on avait choisi. Suivant la grandeur des bâtiments, on désigne le grande et le petit degrat." (Duhamel Du Monceau, *Traité général des pesches*, 1769). Work done in the fields when fishermen are prevented by the weather from going to sea.

DEMERSAL. Near the bottom of the sea

***DEMI-EAU.** Mid-water

DEPTH (chute). The vertical measurement of a net

FAG OUT: Hot days of August that are not good for fishing. The English word "fag" is the source of the French equivalent.

DRAFT. Unit of weight equal to 238 lb. of fresh cod

DRIFTING, DRIFTNET FISHING. Fishing with gillnets from a barge that is allowed to drift with the current

FATHOM. A unit of depth equal to 6 ft or 1.83 m

FISH-HOLD? (port). Area inside barge or on stage-head for storing fresh cod

FLAKE. A rectangular platform about four feet high on which split, salted cod are laid to dry in the sun and wind (Figs. 1, 66, 67)

FLAT. A flat-bottomed boat used for transporting cod to shore from the barge

***FLATTEE.** The quantity of fish or other cargo that a flat can hold

FLOAT. Small pieces of wood or cork evenly spaced along the headline of a fishing net to keep the net afloat

GAFF. "A handled hook for holding or lifting heavy fish" (NCD). Also, "a spar for extending the head of a fore-and-aft sail" (International Maritime Dictionary, R. de Kerchove, 2nd edition, henceforth IMD) (Fig. 18).

GRAPNEL. A small anchor, with five or six hooks, used on barges and flats

HAWSER. "A large rope for towing, mooring, or securing a ship" (NCD)

HEADER. "A name given to the man...who cuts open the fish, tears out the entrails, and breaks off the head of the fish before passing them to the gutter or splitter" (IMD) (Figs. 54, 56)

HEADING. Cutting or breaking off the head of a fish (Figs. 54, 56)

JIG, JIGGER. A lure used to attract fish, specifically cod, or squid (Figs. 52, 53)

KENCHING. Method of salting in which fish are laid out on a floor and salted, in contrast with pickle-salting, a method in which the fish are first put in tubs or tanks

KILLICK. "A small anchor for a boat" (IMD) (Fig. 30)

MARKS. Landmarks fishermen use for finding their way at sea

NIPPER. Band to protect the hands while hauling lines (Fig. 49)

MOORING. "A place...to which a craft can be made fast" (NCD)

NET. Gillnet used for catching herring, mackerel, smelt, cod and salmon

NAPE. The left and right sides of a split cod, above the backbone

NETTING NEEDLE. Utensil for repairing nets

OLD WOMAN. Local name for a reef off the Cape Gaspé. By extension, the area in which the reef is located - the south coast of Forillon from Cape Gaspé to Indian Cove - is called La Vieille in French, but Shiphead in English.

PELAGIC. In this monograph refers to the water above the hyperbenthic layer, which is 0-10 m from the bottom

[PRESS-]PILING. Piling up cod during the drying process to press or squeeze moisture out of the fish. This work is done by pilers.

***PIQUOI.** Handled iron tip for unloading fish, similar in appearance and function to gaff (Fig. 31)

PLANKING. "A general term for the wooden covering of the frames externally or internally and the covering of the beam" (IMD)

***RAMEE.** Two codfish hooked simulataneously on the same hand line

SHEER STRAKE. "The top line of planking in a wooden ship" (Webster's International Dictionary)

SHORE-WORKER. Person whose job it is to process dried cod in a company fishing establishment

SNOOD. "One of a number of short lines, each carrying a baited hook, attached at regular distances along the main line" (Shorter Oxford English Dictionary)

SPRIT. "A pole set diagonally across a fore-and-aft sail to extend that sail by the peak" (IMD) (Fig. 18)

SPLITTER. "The member of a dressing gang...who, continuing the opening made by the throater, splits the fish close by the side of the backbone from the body. He is equipped with a peculiarly shaped knife, the blade of which is somewhat curved flatwise," (IMD) (Figs. 54, 56; knife, Fig. 57.)

SPLITTING. In this monograph can refer to the work of the throater or the header, as well as that of the splitter (Figs. 54, 56)

SPREADING. Work done by spreaders, consisting in putting cod out on flakes or on the beach to dry

STAGE. Building where the cod is processed (splitting, salting, piling), located on the beach (Figs. 1, 3, 7, 10, 33)

STAGE-HEAD. Platform on piles that extends one end of the stage over the water to allow fishermen to dock their boats and unload their catch

STOPPER. "A short length of rope or chain for checking the running of a rope...or for holding it firmly" (IMD). In the Gaspé, a rope used for stringing a number of gillnets together.

TACK. "The direction of a ship with respect to the trim of her sails" (NCD)

TANBARK. "A bark rich in tannin bruised or cut into small pieces and used in tanning" (NCD), used for treating fishnets before the season opens

*TANGON. A system for anchoring a herring net or a boat (Figs. 22, 30)

THOLE, THOLEPIN. "One of a pair of pins set in the gunwhale of a boat to serve as oarlocks" (NCD), also a pin used to hold a moveable bowsprit fast to the stem of a barge (Fig. 20)

Throater. "The member of a dressing gang...who cuts down the belly and lays open the abdominal cavity of the fish" (IMD)

THROATING. Work done by the throater

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Respondents

Fifty-seven interviews given by the following persons:

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